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HDR Engineering, Inc. Welrton, W VA

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110
Joe Manchin III Charleston, West Virginia 25305-0430 • (304) 558-3505

January 20, 2010

Mr. Robert M. Young ODOT Historian and Scenic Byways Program Manager Ohio Department of Transportation 1980 W. Broad Street Columbus, OH 43223-1102

Dear Mr. Young:

Brooke County, WV and Jefferson County, OH Proposed Ohio River Bridge State Project No. S205-2/23-0.00 00 Federal Project No. HPP-0223(003)D Agency Coordination

The West Virginia Division of Highways has initiated NEPA studies for the above referenced project. This proposed new river crossing would span the Ohio River and link WV 2 in Brooke County, south of Wellsburg with OH SR 7 in Jefferson County in the Brilliant vicinity. A Project Location Map is attached for your use.

This correspondence is to initiate coordination with your office since the project may include roadway improvements to SR 7. It is our understanding that SR 7 is designated as the Ohio River Scenic Byway at both the state and national level. To facilitate the study of this corridor as part of the NEPA process, we request a copy of the Ohio River Scenic Byway Corridor Management Plan and a determination of the intrinsic resources of SR 7.

Should you require additional information, please contact Ms. Jacqueline Giles of our Environmental Section at 304-558-9669.

Very truly yours,

Gregory L. Bailey, P.E., Director Engineering Division

By:

Ben L. Hark

Environmental Section Head

GLB:Hw Attachments

cc: DDE(JG), DDR (BM)

Mr. Mark J. Sikora, P.E., HDR Engineering, Inc. Mr. Christopher Varcolla, P.E., ODOT District 11

E.E.O./AFFIRMATIVE ACTION EMPLOYER



Commander Eighth Coast Guard District 1222 Spruce Street St. Louis, MO 63103-2832 Staff Symbol: dwb Phone: (314)269-2382 Fax: (314)269-2737 Email: david.a.orzechowski@uscg.mil

16591.1/75.5 OHR October 4, 2011

Mr. Ahmed N. K. Mongi, P.E. West Virginia Division of Highways Engineering Division 1900 Kanawha Boulevard, East Building 5, Room A-430 Charleston, WV 25305 PECIEIVED
OCT 1 1 2011

ENGINEERING DIVISION WV DOH

Subj: PROPOSED WEST VIRGINIA BRIDGE, BETWEEN MILE 75.5 AND 76.0, OHIO RIVER

Dear Mr. Mongi:

Please refer to your e-mail dated September 14, 2011 regarding the River Navigation Simulation Report for the subject bridge.

The Coast Guard has reviewed the report and determined navigational requirements along with pier locations for the two potential crossing alternatives under consideration. Alternative #2 located at mile 75.9 with the left descending navigation pier located along the West Virginia bank. Alternative #8 located at mile 75.8 with the right descending navigation pier located in line with the barge fleet.

A minimum horizontal clearance of 800 feet or greater would safely meet the needs of navigation for either alternative. Please provide a drawing that shows the actual pier locations for each alternative.

I appreciate the opportunity to make comments regarding the needed navigation clearances early in the design process. Should you have any questions, please contact Mr. David Orzechowski at the above telephone number to discuss this project.

Sincerely

Bridge Administrator Western Rivers By direction of the District Commander

WASHBURN



Commander Eighth Coast Guard District 1222 Spruce Street St. Louis, MO 63103-2832 Staff Symbol: dwb Phone: (314)269-2379 Fax: (314)269-2737 Email: eric.washburn@uscg.mil

16591.1/75.5 OHR February 27, 2009

Mr. James E. Sothern Deputy State Highway Engineer, West Virginia Department of Transportation 1900 Kanawha Blvd, Bldg Five, Room 110 Charleston, WV 25305-0430

Subj: PROPOSED WEST VIRGINIA BRIDGE, MILE 75.5, OHIO RIVER

Dear Mr. Sothern:

This is in reply to your letter dated December 11, 2008 concerning the proposed bridge project at approximately Mile 75.5 on the Ohio River. Regardless of which alternative is selected, the minimum vertical clearance shall be 55.0 feet above the 2% flowline or 69.0 feet above normal pool, whichever is greater.

Downbound tows are pushed towards the left descending bank after rounding the bend so the left descending navigation pier will need to be near the river bank with the distance chosen dependent on the alternative selected. For alternatives "C" and "D", a minimum horizontal clearance of 700.0 feet would be acceptable. A much wider channel will be required if one of the other alternatives is chosen.

Thank you for contacting us early on in this project and I look forward with working with you on your Coast Guard bridge permit submittal. You can contact Mr. Eric Washburn at the above number with questions regarding our requirements.

Sincerely,

ROGER K. WIEBUSCH Bridge Administrator

By direction of the District Comman

ENGINEERING DIVISIO*

WV DOH

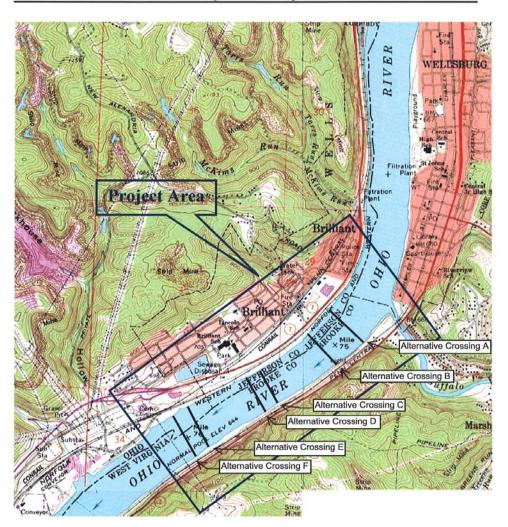
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Deputy State Hwy. Eng. Construction

State Project: S205-2/23-0.00 00 Federal Project: HPP-0223(003)D Ohio River Bridge Crossing Brooke County, WV and Jefferson County, OH

Project Area Map



C:\PWworking\PITT\d0116857\Wellsburg Bridge Project Area Map.doc



Buckeye Local School District

6899 State Route 150 Dillonvale, Ohio 43917

Phone: (740) 769-7395 769-2234 598-4160 546-4900 Fax: (740) 769-2361

Web Address: www.omeresa.net/schools/buckeye

September 25, 2009

Mr. Ben L. Hark Environmental Section Head West Virginia Department of Transportation Division of Highways 1900 Kanawha Boulevard East, Building 5, Room 110 Charleston, West Virginia 15205-0430

Dear Mr. Hark:

Thank you for taking the time to return my telephone call in response to your inquiry regarding North Middle School and the adjacent football field. I have enclosed a copy of resolution #172/09 passed by the Buckeye Local Board of Education on August 10, 2009.

The Buckeye Local School District has elected to close North Middle School effective June, 2010. The students currently attending North Middle will attend SouthWest Middle in Tiltonsville, Ohio as of August, 2010. The Buckeye Local School District will not use the football field for any organized athletic contests sponsored by the District after June, 2010. All interscholastic activities sponsored by the School District will be held at other sites throughout the Buckeye Local School District.

Should you need to contact me in regard to this matter, please do not hesitate to do so. I can be reached at the numbers listed above.

Sincerely,

Mark S. Miller Superintendent

Market Miller

CW

Enc

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RECORD OF PROCEEDINGS

	BUCKEYE LOCAL BOARD OF	EDUCATION
REGULAR MEETING HELD: MONDAY	6:00 PM	AUGUST 10, 2009
APPOINTMENT OF DELE	GATE/ALTERNATE-OSBA ANNUAL	MEETING /68/05
Approve the following mem	of the Superintendent, it was moved by bers to serve as the Buckeye Local Sc Dhio School Boards Association to be h	Mr. DeLuca and seconded by Mr. Zelek, to hool District representative and alternate at leld in November, 2009:
Delegate- Alternate-	Naoma Kolkedy Don Moore	
Ayes: Zelek, Moore, Signo Noes: None Motion carried.	rini, DeLuca, Kolkedy	(5) (0)
APPROVAL OF EMERGE	NCY MEDICAL PROVIDER	169/09
Mr. Signorini to adopt a res	of the Superintendent, it was moved by colution to approve Jim Horton as an Er 200 per month, not to exceed \$12,000.0	nergency Medical provider for the 2009/10
Ayes: Moore, Signorini, De Noes: None Motion carried.	eLuca, Zelek, Kolkedy	(5) (0)
APPROVAL OF STRATE	GIC PLAN FOR DISTRICT FISCAL ST	ABILITY /70/09
Upon the recommendation approve the Strategic Plan	of the Superintendent, it was moved by for District Fiscal Stability as presented	y Mr. DeLuca and seconded by Mr. Moore t d.
Ayes: DeLuca, Zelek, Moo Noes: None Motion carried.	ore, Signorini, Kolkedy	(5) (0)
ACCEPTANCE OF RESIG	GNATION-CAROL BROWN	171/09
accept the resignation of C	of the Superintendent, it was moved be Carol Brown, custodian, for the purpose her years of service to the Buckeye Loc	y Mr. DeLuca and seconded by Mr. Moore s of retirement,effective August 3, 2009. M al School District.
Ayes: Signorini, DeLuca, Noes: None Motion carried.	Moore, Zelek, Kolkedy	(5)
APPROVAL TO CLOSE	NORTH MIDDLE SCHOOL	172/09
to adopt a resolution due t	o financial reasons to close the following the control of the students of the	by Mr. Moore and seconded by Mr. DeLuca ng school: North Middle School, located at ents otherwise assigned to attend Buckeye west Middle School, located at 100 Walden
Ayes: Moore, Zelek, DeLi Noes: None Motion carried.	uca, Signorini, Kolkedy	(5) (0)



The Culture Center 1900 Kanawha Blvd., E. Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org Fax 304.558.2779 • TDD 304.558.3562

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Mr. Gregory L. Bailey, P.E. Director WV DOH Building Five, Room 110 Capitol Complex Charleston WV 25305

ENGINEERING DIVISION WV DOH

RE: Ohio River Bridge

State Project Number: S205-2/23-0.00 00; Federal Project HPP-0223(003)D

FR#: 09-640-BR-3

Dear Mr. Bailey:

We have reviewed the *Phase I Cultural Resource Survey* submitted for the above referenced project to determine potential effects to cultural resources. Submitted information indicates that archaeological resources will be addressed in a separate submittal. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

Architectural Resources:

Submitted information indicates that since your initial submission in April 2009, the project has been changed to remove Alternatives 4A and 7. Alternatives 2, 2B, 8 and 8B remain. The area of potential effect (APE) for all alternatives encompass the same area as all alternatives are very close in proximity to each other. According to the submitted report, the areas of previous concern, including the National Register Wellsburg Historic District and the three eligible resources -- Alexander Wells Cabin, the Ohio River Navigation Lights and the Brooke County Poor Farm -- are no longer within the APE for the remaining alternatives. Submitted maps verify this assertion. In addition, submitted information states that there are no buildings 50 years or older within the defined APE. Submitted photographs verify this. It is the consultant's opinion that the selection of any of the remaining alternatives for the proposed project will have no impact to architectural resources eligible for or included in the National Register of Historic Places. After review of the submitted information, we concur with this assessment. No further consultation regarding architectural resources is necessary; however, should your project change or become altered in any way, please contact us for additional consultation at that time.

Public Comments

According to the supplied USGS topographic map for this project, the APE in the Ohio portion of this project encompasses buildings. Our April 2009 letter had requested that you contact the Ohio Historic Preservation Office in Columbus, Ohio, for consultation regarding this project. If you have not already done so, we request that you contact that agency at this time.

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please contact Shirley Stewart Burns, Structural Historian, at (304) 558-0240.

Susan M. Pierce

Deputy State Historic Preservation Officer

SMP/SSB

Sincerely

OHIO DEPARTMENT OF TRANSPORTATION

CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223 JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

OFFICE OF ENVIRONMENTAL SERVICES

July 22, 2011

Mr. Mark Epstein, Department Head Resource Protection and Review Ohio Historic Preservation Office 800 East 17th Avenue Columbus, Ohio 43211

Attn.: Nancy Campbell

ODOT Reviews Manager History/Architecture

Thomas Grooms

ODOT Review Manager Archaeology

Re:

JEF-New Ohio River Bridge (PID 79353)

Cultural Resource Coordination

Dear Mr. Epstein:

Attached for your review and files are copies of a Memo-to-File summarizing the archaeological resources review (dated July 18, 2011) and a Phase I history/architecture survey report entitled *Historic Resources in Ohio, Phase I Literature Review-History/Architecture, Ohio River Crossing Jefferson County, Ohio, PID#79353, State Project No. S205-2/23-0.00 00, Federal Project HPP-0223(003)D*, prepared for the Ohio Department of Transportation (ODOT) by Christine Davis Consultants, Inc., Verona, Pennsylvania. The proposed project involves the construction of a new bridge over the Ohio River just south of Brilliant, Ohio (Jefferson County) and south of Wellsburg, West Virginia (Brooke County). The proposed project also includes roadway improvements to provide for new bridge approaches. Four alternative crossings are being considered at this time (Alternative Crossing 2, 2B, 8, and 8B). The Area of Potential Effect (APE), therefore, is the area encompassing the footprint of all four proposed alternatives and adjoining parcels on the Ohio side of the river.

Literature Review

The primary focus of the review was to determine the potential for archaeological resources. Investigations were designed to determine the amount of cultural resource coordination required. A literature search was included in the review to determine if previously recorded archaeological sites would be affected by the proposed bridge construction project. The literature review was conducted using the Ohio Historic Preservation Office's on-line mapping service via GeoMedia. No previously recorded archaeological sites are recorded within the 1.25 mile study area. Similarly, no previously identified history/architecture properties are located within the APE for the proposed Ohio River Crossing alternatives. Therefore, no previously recorded cultural resources in Ohio will be affected by the proposed bridge construction project.

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Summary of Archaeological Field Investigations

Archaeological field investigations were completed for the proposed JEF-New Ohio River Bridge project on June 21, 2011. Visual inspection and soil coring indicated that the entire area had experienced extensive levels of disturbance as a result of roadway construction, sand and gravel quarrying operations, cut-and-fill activities, modern commercial and residential development, commercial filling operations, and the construction of a sewage treatment plant (see attached memo-to-file for a detailed summary). These disturbances have significantly altered the original landscape, precluding the existence of intact archaeological remains. Therefore, no further archaeological investigations are recommended for the proposed JEF-New Ohio River Bridge project unless the project scope changes.

-2-

Summary of History/Architecture Investigations

Eight history/architecture properties, fifty years of age or older, were identified within the APE during the history/architecture field survey. The properties were documented on the Ohio Historic Inventory forms: JEF-926-14 through JEF-933-14. Copies of the forms are included in the enclosed report. The National Register criteria of effect were applied to the identified history/architecture properties. In conclusion, no history/architecture properties within the APE meet the minimum criteria for inclusion on the National Register of Historic Places. No further history/architecture investigations are warranted.

Conclusion

In accordance with the Advisory Council On Historic Preservation's current regulations and in compliance with 36 CFR 800.4 (d) (1), we request concurrence with the following:

- 1. No previously recorded cultural resources in Ohio will be affected by the proposed project.
- 2. Based on the archaeological field investigations and the amount of modern ground disturbance observed and documented throughout the project area, no significant archaeological remains will be affected by the proposed bridge construction on the Ohio side of the Ohio River and no further archaeological investigations are recommended for the proposed JEF-New Ohio River (PID 79353) project unless the scope of work were to change.
- 3. The eight previously unrecorded history/architecture resources identified by this survey (JEF-926-14 through JEF-933-14) are not eligible for inclusion in the National Register of Historic Places.
- 4. No further cultural resource investigations are recommended for the proposed JEF-New Ohio River Bridge (PID 79353) project on the Ohio side of the river unless the scope of the undertaking changes.

On behalf of the FHWA, and in accordance with 36 CFR Part 800.4 (d) (1), we have determined that a finding of "no historic properties affected" is appropriate for the subject project on the Ohio side of the Ohio River. We would appreciate the return of this letter, signed to indicate that OHPO does not object to ODOT-OES's cultural resources

findings. If no objection is received within 30 days, in accordance with the Advisory Council on Historic Preservation's current regulations under 36 CFR 800.4 (d) (1), FHWA's and ODOT's responsibilities under Section 106 are fulfilled. If you have any questions or concerns, please contact Jason Watkins, Staff Archaeologist, at (614) 466-5105 or Susan Gasbarro, Staff Historian, at (614) 728-0719.

-3-

Respectfully,

Timothy M. Hill, Administrator Office of Environmental Services

OHIO STATE HISTORIC PRESERVATION OFFICE CONCURRENCE:

August 1, 2011 (Date) Nancy H. Campbell

T. Stratton, District 11 w/att.; L. Hoffman, OES; File w/ att.





The Culture Center 1900 Kanawha Blvd., E. Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org Fax 304.558.2779 • TDD 304.558.3562

June 24, 2011

Mr. Gregory Bailey WV Division of Highways Building Five, Room 110 Capitol Complex Charleston, WV 25305

RE: Proposed Ohio River Crossing Bridge

State Project Number S205-2/23-0.00 00

FR#: 09-640-BR-2

Dear Mr. Bailey:

We have reviewed the report titled *Phase IA Archaeological Survey Addendum Report Ohio River Crossing, Brook County, West Virginia.* As required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

Archaeological Resources:

According to the report, changes have been made to the proposed alternative bridge crossings construction plans. Alternatives 4A and 7 have been deleted and two new Alternatives 8 and 8B have been added. As such, a Phase IA pedestrian survey was conducted for Alternatives 8 and 8B to asses the potential for archaeological resources. Based on the information provided the majority of each alternative crossing was observed to contain steep slope or previous disturbances. However, several areas within the new alternative crossings have been recommended for subsurface testing and geomorphological study. We concur with the recommendations set forth in the addendum report and remain in concurrence with our previous determination that areas within Alternative 2 also be subject to subsurface testing and geomorphological study. We will comment further upon receipt of the Phase IB technical report.

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please contact Kristin D. Scarr, Archaeologist, at (304) 558-0220.

Susan M. Pierce

Deputy State Historic Preservation Officer

SMP/KDS

Since



OHIO DEPARTMENT OF TRANSPORTATION

CENTRAL OFFICE, 1980 WEST BROAD STREET, COLUMBUS, OH 43223 OFFICE OF ENVIRONEMTNAL SERVICES

APR 1 5 2010

ENGINEERING LIVISION

MV DOH

April 12, 2010

Mr. Gregory L. Bailey
Director, Engineering Division
West Virginia Department of Transportation
Division of Highways
1900 Kanawha Boulevard East, Room 110
Charleston, West Virginia 25305-0430

Attn.: Ben L. Hark

Environmental Section Head

Roger B. Wise Archaeological Unit

5205-2/23-0.00

JEF-New Ohio River Bridge (PID 79353)

Review of Alternatives

Dear Mr. Bailey:

OES has reviewed the submitted literature search containing survey recommendations for the proposed bridge construction project. Currently, feasible alternatives are being considered for a new Ohio River Crossing in the area of Brilliant Ohio. The project also includes improvements to State Route 7 and other collector routes in order to connect with the new bridge.

On March 17, 2010, staff from the Ohio Department of Transportation—Office of Environmental Services (ODOT) along with the a representative of the Ohio State Historic Preservation Office conducted a field review the JEF-New Ohio River Bridge study area (Brilliant, Ohio) in general, and the estimated footprint of three feasible bridge alternatives in particular. Based on Ohio's review, some level of Phase I archaeological investigations will be required to document the level of disturbance across the project area and demonstrate whether archaeological resources will be impacted by proposed construction. However, we do not believe there are any red flag issues or any fatal flaw archaeological issues which need to be considered in the highway design; might require the elimination of an alternative; require the development of avoidance options during the design process; or delay the use of any of the feasible designs as the preferred alternative option. Considering cultural resources, we believe the selection of the preferred should be made based on engineering, safety, or cost related issues.

The prepared Phase I literature search (Davis and Biondich 2009) suggests there is a potential for buried archaeological resources along the floodplain portions of each alternative or low elevation areas (approximately 660 to 670 foot M.S.L.) adjoining the course of the Ohio River. We would also like to note there is a good chance to encounter a buried Late Prehistoric Period village sites and/or human remains in a village context if an undisturbed segment of the Ohio River floodplain were impacted by the bridge approach construction. The possibility is based on the occurrence of the Wellsburg Village Site which was found on the north end of Wellsburg, West Virginia and on the floodplain of the Ohio River at

AN EQUAL OPPORTUNITY EMPLOYER

an estimated elevation of 660 to 670 ft. M.S.L. However, our field review particularly where the three alternatives are situated, suggests there is only a remote possibility that a significant, very late resource of this nature would be found intact by archaeological investigations or be affected by proposed bridge construction activities when it ultimately occurs. Evidence was found to suggest that cutting and barrowing was common along this portion of the floodplain. Evidence was also found that these low areas were subsequently filled with soils mixed with rubble, industrial waste, slag, and broken rock. Some deposits appeared to be composed of cut and fill modern (unstructured) alluvial material. The obvious high level of modern disturbance on the floodplain at Brilliant, Ohio suggests that intact prehistoric archaeological deposits are unlikely.

Based on the Ohio review with the Ohio SHPO there is no immediate need to conduct archaeological investigations of the three design options. Our Project Development Process (PDP process) recommends that Phase I archaeological investigations should be delayed until the preliminary plans of the Preferred Alternative are available. There is no strong physical or contextual evidence to argue otherwise. When the Preferred Alternative has been selected, archaeological survey can then be used to delineate the level of disturbance across the project area and demonstrate whether archaeological resources will be impacted by proposed construction

Once the preliminary design has been developed, we request copies of this plan be sent to ODOT's Office of Environmental Services to better reconsider the project and further scope of the archaeological investigations, and determine more precisely what type of documentation will be necessary to conclusively demonstrate whether or not the JEF-New Ohio River Bridge project might impact any significant archaeological resources in Ohio. Based on this direction, the consultant's archaeological fieldwork can then begin.

Respectfully,

Timothy M. Hill Administrator

Office of Environmental Services

TMH: jaw

T. Stratton, District 11; M. Epstein, OHPO; File; Reading File

Graham, Sox



ENGINEERING DIVISION

WV DOH

The Culture Center 1900 Kanawha Blvd., E. Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org Fax 304.558.2779 • TDD 304.558.3562

March 22, 2010

Mr. Gregory L. Bailey, P.E. Director WV DOH Building Five, Room 110 Capitol Complex Charleston WV 25305

RE: Proposed Ohio River Crossing Bridge

State Project Number: S205-2/23-0.00 00; Federal Project HPP-0223(003)D

09-640-BR-1 FR#:

Dear Mr. Bailey:

We have reviewed the report titled Phase IA Archaeological Survey, which was submitted for the above referenced project to determine potential effects to cultural resources. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

Archaeological Resources:

According to the report, 3 alternative bridge crossings, Alternatives 2, 4A and 7, have been selected for further study. These areas were subjected to pedestrian survey to assess landforms for the potential to contain archaeological resources. It is our understanding that, while a majority of each alternative was observed to be steep and/or disturbed, discrete areas within each have been recommended for geomorphological study and possible shovel testing. We concur with the recommendations made and will provide further comment upon receipt of the Phase 1B report.

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please contact Lora A. Lamarre, Senior Archaeologist, at (304) 558-0240.

Sugan M. Pierce

Deputy State Historic Preservation Officer

SMP/LAL

Since



June 17, 2009

Ms. Jacqueline Giles Environmental Section West Virginia Department of Transportation Division of Highways 1900 Kanawha Blvd. East Building Flve, Room 110 Charleston, WV 25305-0430

Re: Agency Coordination, Proposed Ohio River Bridge State Project No. S205-2/23-0.00 00 Federal Project No. HPP-0223(003)D

Dear Ms. Giles:

In response to the letter from Gregory L. Balley dated April 8, 2009, addressed to Dr. William K. Laldlaw, Jr., the Ohio Historic Preservation Office would like to be a consulting party in the Section 106 phase of your environmental process.

There are nine properties in the Ohio Historic Inventory that are in the area near the western side of the proposed new bridge. We trust that they will be considered in your planning process, and we want to receive the information that is shared with stakeholders and members of the public.

Could you please add this name to your mailing list:

Mark J. Epstein, Head Resource Protection and Review Department Ohio Historic Preservation Office 1982 Velma Ave. Columbus, OH 43211-2497

We would also like to receive a synopsis of your coordination to date with the Ohio Department of Transportation.

Thank you.

Mancy H. Campbell

Nancy H. Campbell Architecture Transportation Reviews Manager Resource Protection and Review Department

Cc: Timothy M. Hill, Administrator, Office of Environmental Services, Ohio Department of Transportation

OHIO HISTORICAL SOCIETY

Ohio Historic Preservation Office

1982 Velma Avenue, Columbus, Ohio 43211-2497 ph: 614.298.2000 fx: 614.298.2037

www.ohiohistory.org



WEST VIRGINIA DIVISION OF **CULTURE & HISTORY**

The Cultural Center 1900 Kanawha Blvd., E. Charleston, WV 25305-0300

Phone 304.558.0220 Fax 304.558.2779 TDD 304.558.3562 www.wvculture.org EEO/AA Employer

April 22, 2009

Mr. Gregory L. Bailey, P.E. Director WV DOH Building Five, Room 110

Capitol Complex Charleston WV 25305

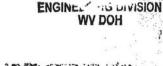
Proposed Ohio River Bridge

State Project Number: S205-2/23-0.00 00

Federal Project HPP-0223(003)D

FR#: 09-640-BR

Dear Mr. Bailey:



APR 2 9 2009

Environmental Section WVD9T/DOH

We have reviewed the information provided for the above referenced project to determine potential effects to cultural resources. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

According to submitted project information, the WV DOH is proposing a new river crossing that would span the Ohio River and link WV 2 in Brooke County. In addition to construction of a new bridge, roadway improvements will be made to provide new bridge approaches.

Architectural Resources:

A search of our records indicates that the Area of Potential Effect (APE) includes the Wellsburg Historic District which is listed in the National Register of Historic Places. In addition, there are several individual resources that have been surveyed within the APE that are considered eligible for listing in the National Register of Historic Places. They include survey #BR-0017 the Alexander Wells Cabin, BR-0045 the Ohio River Navigation Lights (Wellsburg), and BR-0051 the Brooke County Poor Farm.

So that we can continue our review please provide the following information: a set of design plans indicating the location of the new bridge, the new bridge approaches and the roadway improvements. Also, please provide a description of the type of bridge that will be constructed. In addition, please provide photographs of any structure fifty years old or older that is within the APE. We reserve the right to request the completion of West Virginia Historic Property Inventory forms based on our review of the photographs. We will continue our review upon receipt of the information requested.

Archaeological Resources:

Our records indicate that there are no previously recorded archaeological resources within the defined project area. However, landforms near the confluence of Buffalo Creek and the Ohio River have a high potential for containing archaeological resources. Although the USDA Web Soil Survey for this area indicates these landforms are comprised of Made Land and the Urban Land - Udorthents Complex, this information should be verified should any of these landforms fall within the proposed project area. In Mr. Bailey FR#: 09-640-BR April 22, 2009 Page 2

addition, the defined project area includes landforms similar to those in which the East Steubenville (46Br31) and Highland Hills (46Br60) Sites were discovered. Should the proposed project impact any of the ridge top located above the Ohio River, it will need to be surveyed. We will provide further comment once design plans have been received.

Public Comment:

Please contact the Ohio State Historic Preservation Office for their comments. Their state contact information follows.

Ohio Historic Preservation Office Ohio Historical Society 1982 Velma Avenue Columbus, Ohio, 43211-2497

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please contact Ginger Williford, Structural Historian, or Lora Lamarre, Senior Archaeologist, at (304) 558-0240.

Justin

Deputy State Historic Preservation Officer

SMP/GW/LAL



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HDR Engineering, III. Welrton, W VA

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

Joe Manchin III Governor 1900 Kanawha Boulevard East • Building Five • Room 110 Charleston, West Virginia 25305-0430 • (304) 558-3505

November 12, 2010

Mr. Jason Heath Manager of Water Monitoring, Assessment and Standards The Ohio River Valley Water Sanitation Commission (ORSANCO) West Virginia Field Office 5735 Kellogg Avenue Cincinnati, OH 45230

Dear Mr. Heath:

Brooke County, WV and Jefferson County, OH Proposed Ohio River Bridge State Project No. S205-2/23-0.00 00 Federal Project No. HPP-0223(003)D Agency Coordination

Please be advised the West Virginia Division of Highways is conducting National Environmental Policy Act studies for the above referenced project. As we move forward with this process, we request your input as to any concerns your organization may have regarding this area.

This proposed new river crossing would span the Ohio River and link WV 2 in Brooke County, south of Wellsburg with OH S.R. 7 in Jefferson County in the Brilliant vicinity. The project limits are from the Cardinal Plant in Ohio to Buffalo Creek in West Virginia. A Project Location Map and our proposed alternatives are attached for your information.

We understand your organization regularly monitors the River and its tributaries. We respectfully request any available data, such as water quality, aquatics, or other sampling information, for the Ohio River near MP 74.8 to 76.2 and Buffalo Creek.

Should you require additional information, please contact Ms. Jacqueline Giles of our Environmental Section at 304-558-9669.

Very truly yours,

Gregory L. Bailey, P.E. Director

Engineering Division

By: From L Hank

Ben L. Hark

Environmental Section Head

GLB:Hw Attachments

ce: Mr. Mark J. Sikora, P.E., HDR Engineering, Inc.

Mr. Christopher J. Varcolla, P.E., ODOT District 11

bcc: DDE(JLG)

E.E.O./AFFIRMATIVE ACTION EMPLOYER



STREET ADDRESS:

Lazarus Government Center

50 W. Town St., Suite 700

Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184 www.epa.state.oh.us MAILING ADDRESS:

P.O. Box 1049 Columbus, OH 43216-1049

April 27, 2009

Gregory L. Bailey, P.E., Director Division of Highways, Engineering Division West Virginia Department of Transportation Building Five, Room 110 1900 Kanawha Blvd. East Charleston, West Virginia 25305-0430 APR 3 0 2009

ENGINELKING DIVISION WY DOH

Re: State Project No. S205-2/23-0.00 00/ Federal Project No. HPP-0223(003)D

Dear Mr. Bailey:

Thank you for your recent inquiry regarding Ohio's water quality information for the Ohio River and adjacent waters near Brilliant, Ohio. Specifically, you are requesting information as part of a NEPA review for a proposed new Ohio River bridge to be located in Brooke County, West Virginia and Jefferson County, Ohio.

Ohio EPA's most recent sampling of the Ohio River in the vicinity of Brilliant was conducted in 1996. Biological quality is generally fair to good throughout the reach. There are no endangered or threatened species in the reach of the river (5 miles upstream and downstream of Brilliant). However, there are records of River Redhorse (Ohio Department of Natural Resources Special Interest fish species) in the lower part of the reach.

I have enclosed a list of the fish species found, as well as the Index of Biotic Integrity (IBI) scores, macroinvertebrate taxa present, and the Invertebrate Community Index (ICI) scores for the subject reach.

Please feel free to contact Ric Queen of my staff at (614) 644-2872 regarding any permitting questions you might have.

Sincerely,

George Elmaraghy, P.E., Chief Division of Surface Water

Cr Elm-1/9

Enclosure

Ted Strickland, Governor Lee Fisher, Lieutenant Governor Chris Korleski, Director

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River Code: 25-001 River Mile: 78.50 Time Fished: 2532 sec Dist Fished: 0.50 km	Locat Drain	Stream: Ohio River Location: Drainage: 24000.0 sq mi Basin: Ohio River No of Passes: 1					Sample Date: 1996 Date Range: 10/16/1996 Sampler Type: N			
Species Name / ODNR status			Breed		# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Gizzard Shad	100-001-00	0	М		7	14.00	14.58	2.78	7.13	198.86
Smallmouth Buffalo	C	1	M		10	20.00	20.83	14.74	37.74	736.80
Common Carp	G	0	M	T	2	4.00	4.17	5.50	14.09	1,375.00
Channel Catfish	F		C		3	6.00	6.25	3.36	8.62	560.67
Flathead Catfish	F	P	C		1	2.00	2.08	1.43	3.66	715.00
Black Crappie	S	1	C		1	2.00	2.08	0.14	0.35	68.00
Rock Bass	. 8	C	C		1	2.00	2.08	0.31	0.79	155.00
Smallmouth Bass	F	C	C	M	9	18.00	18.75	5.20	13.31	288.78
Spotted Bass	F	C	C		4	8.00	8.33	0.51	1.32	64.25
Bluegill Sunfish	s	1	C	P	1	2.00	2.08	0.19	0.50	97.00
Sauger	F	P	S		1	2.00	2.08	0.62	1.59	311.00
Walleye	F	P	S		1	2.00	2.08	0.16	0.40	78.00
Freshwater Drum			М	P	7	14.00	14.58	4.10	10.51	293.00
	Mile T	otal			48	96.00		39.05		
	Numb	er of	Specie	s	13			3		
	Numb	er of I	Hybrid	s	0					

River Code: 25-001 River Mile: 77.00 Time Fished: 2571 sec Dist Fished: 0.50 km	Stream: Ohio River Location: Drainage: 24000.0 sq mi Basin: Ohio River					No of Pa	asses: 1	Sample Date: 1996 Date Range: 10/16/1996 Sampler Type: N		
Species Name / ODNR status			Bree		# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Gizzard Shad		0	M		6	12.00	7.32	0.84	1.29	70.00
Black Buffalo	C	1	M		1	2.00	1.22	3.38	5.20	1,690.00
Smallmouth Buffalo	C	1	M		8	16.00	9.76	18.45	28.40	1,153,13
Shorthead Redhorse	R	1	s	M	1	2.00	1.22	0.70	1.08	350.00
Spotted Sucker	R	1	S		1	2.00	1.22	0.84	1.30	422.00
Common Carp	G	0	M	Т	9	18.00	10.98	22.86	35.19	1,270.11
Silver Chub	N	1	M		2	4.00	2.44	0.04	0.07	11.00
Emerald Shiner	N	1	M		1	2.00	1.22	0.00	0.00	1.00
Spottail Shiner	N	1	M	P	2	4.00	2.44	0.03	0.04	7.00
Common Carp X Goldfish	G	0		T	1	2.00	1.22	1.28	1.98	642.00
Channel Shiner	N	1	M	1	1	2.00	1.22	0.00	0.00	1.00
Channel Catfish	F		C		5	10.00	6.10	9.48	14.60	948.40
Flathead Catfish	F	P	C		3	6.00	3.66	1.43	2.20	238.33
Black Crappie	s	1	C		1	2.00	1.22	0.14	0.22	72.00
Smallmouth Bass	F	C	C	M	21	42.00	25.61	3.06	4.72	72.95
Spotted Bass	F	C	C		1	2.00	1.22	0.21	0.33	107.00
Green Sunfish	s	1	C	Т	1	2.00	1.22	0.08	0.12	40.00
Bluegill Sunfish	s	1	C	P	4	8.00	4.88	0.31	0.48	39.25
Sauger	F	P	s		4	8.00	4.88	1.62	2.49	202.50
Logperch	D	1	s	M	1	2.00	1.22	0.02	0.03	10.00
Greenside Darter	D	1	S	M	1	2.00	1.22	0.00	0.01	2.00
Freshwater Drum			M	P	7	14.00	8.54	0.16	0.25	11.43
	Mile T	otal			82	164.00		64.97		
	Numb	er of s	Specie	es	21					
	Numb	er of I	Hybrid	s	1					

River Code: 25-001 River Mile: 76.50 Time Fished: 1260 sec	Locat	Stream: Ohio River Location: Drainage: 24000.0 sq mi Basin: Ohio River No of Passes: 1							Sample Date: 1996 Date Range: 10/16/1996			
Dist Fished: 0.25 km	Basin	Basin: Ohio River			No of Pa	sses: 1	Sample	Type: N	N			
Species Name / ODNR status			Bree		# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight		
Longnose Gar		P	М		1	4.00	0.92	0.37	0.27	92.00		
Gizzard Shad		0	M		14	56.00	12.84	12.74	9.26	227.57		
Smallmouth Buffalo	C	1	M		12	48.00	11.01	38.79	28.18	808.08		
Quillback	C	0	M		2	8.00	1.83	3.56	2.59	445.00		
Shorthead Redhorse	R	1	S	M	2	8.00	1.83	2.73	1.98	341.00		
Common Carp	G	0	M	T	7	28.00	6.42	30.52	22.17	1,090.14		
Silver Chub	N	1	M		2	8.00	1.83	0.04	0.03	5.00		
Emerald Shiner	N	1	M		30	120.00	27.52	0.15	0.11	1.27		
Channel Catfish	F		C		2	8.00	1.83	15.60	11.33	1,950.00		
Flathead Catfish	F	P	C		1	4.00	0.92	0.87	0.63	218.00		
White Bass	F	P	M		3	12.00	2.75	0.32	0.23	26.33		
Str. Bass X Wh. Bass	Ε				1	4.00	0.92	0.08	0.06	20.00		
Black Crappie	S	1	C		1	4.00	0.92	0.31	0.23	78.00		
Smallmouth Bass	F	C	C	M	17	68.00	15.60	15.83	11.50	232.80		
Spotted Bass	F	C	C		3	12.00	2.75	0.25	0.18	20.67		
Largemouth Bass	F	C	C		1	4.00	0.92	1.45	1.05	362.00		
Bluegill Sunfish	S	1	C	P	1	4.00	0.92	0.16	0.12	40.00		
Sauger	F	P	S		4	16.00	3.67	2.16	1.57	135.00		
Freshwater Drum			М	P	5	20.00	4.59	11.73	8.52	586.40		
	Mile 7	otal			109	436.00		137.66				
	Numb	er of	Specie	S	18							
	Numb	er of	Hybrid	s	1							

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Page 4

River Code: 25-001 River Mile: 76.20 Time Fished: 2120 sec Dist Fished: 0.50 km	Locat Drain	Stream: Ohio River Location: Drainage: 24000.0 sq mi Basin: Ohio River No of Passes: 1							Sample Date: 1996 Date Range: 10/16/1996 Sampler Type: N			
Species Name / ODNR status			Bree		# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight		
Gizzard Shad		0	М		8	16.00	15.09	2.72	8.58	169.88		
Quiliback	C	0	M		2	4.00	3.77	3.34	10.55	835.50		
Golden Redhorse	R	1	s	M	1	2.00	1.89	0.30	0.95	150.00		
Common Carp	G	0	M	T	7	14.00	13.21	14.21	44.87	1,015.00		
Silver Chub	N	1	M		2	4.00	3.77	0.06	0.18	14.50		
Emerald Shiner	N	1	M		5	10.00	9.43	0.01	0.03	1.00		
Channel Catfish	F		C		2	4.00	3.77	5.82	18.38	1,455.00		
White Bass	F	P	M		4	8.00	7.55	0.25	0.78	31.00		
Str. Bass X Wh. Bass	E				5	10.00	9.43	0.22	0.68	21.60		
Smallmouth Bass	F	C	C	M	5	10.00	9.43	2.00	6.31	199.80		
Bluegill Sunfish	S	1	C	P	1	2.00	1.89	0.08	0.25	40.00		
Sauger	F	P	S		5	10.00	9.43	2.64	8.34	264.20		
Greenside Darter	D	1	s	M	2	4.00	3.77	0.00	0.01	1.00		
Rainbow Darter	D	1	S	M	3	6.00	5.66	0.01	0.02	1.00		
Freshwater Drum			M	P	1	2.00	1.89	0.02	0.06	9.00		
	Mile T	otal			53	106.00		31.67				
	Numb	er of	Specie	es	14							
	Numb	er of	Hybrid	ls	1							

River Code: 25-001 River Mile: 75.50 Time Fished: 2288 sec Dist Fished: 0.50 km	Loca Drain	Stream: Ohio River Location: Drainage: 24000.0 sq mi Basin: Ohio River No of Passes: 1					Sample Date: 1996 Date Range: 10/17/1996 Sampler Type: N			
Species Name / ODNR status			Breed	Fr	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Gizzard Shad		0	М		9	18.00	15.79	0.74	4.88	41.33
Smallmouth Buffalo	C	1	M		1	2.00	1.75	4.20	27.56	2,100.00
Common Carp	G	0	M	T	3	6.00	5.26	7.45	48.89	1,241.67
Silver Chub	N	1	M		1	2.00	1.75	0.03	0.22	17.00
Channel Catfish	F		C		3	6.00	5.26	0.08	0.53	13.33
Flathead Catfish	F	P	C		1	2.00	1.75	0.28	1.84	140.00
White Bass	F	P	M		1	2.00	1.75	0.04	0.26	20.00
Str. Bass X Wh. Bass	E				13	26.00	22.81	0.61	4.03	23.62
Black Crappie	S	- 10	C		2	4.00	3.51	0.20	1.30	49.50
Smallmouth Bass	F	C	C	M	. 3	6.00	5.26	1.05	6.88	174.67
Sauger	F	P	S		6	12.00	10.53	0.38	2.48	31.50
Logperch	D	1	S	M	2	4.00	3.51	0.02	0.14	5.50
Greenside Darter	D	- 1	S	M	2	4.00	3.51	0.00	0.03	1.00
Rainbow Darter	D	1	S	M	4	8.00	7.02	0.01	0.05	1.00
Freshwater Drum			M	P	6	12.00	10.53	0.14	0.91	11.50
	Mile	Total			57	114.00		15.24		
	Num	ber of	Specie	es	14					
	Num	ber of	Hybria	Is	1					

Species	Li	st
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River Code: 25-001 River Mile: 71.70 Time Fished: 2528 sec Dist Fished: 0.50 km		tion: nage:	Ohio I 24000. io Rive	0 sq n	ní	No of Pa	asses: 1	Sample Date Ra		996 /16/1996 V
Species Name / ODNR status			Breed Guild		# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Gizzard Shad		0	М		4	8.00	7.14	1.52	8.06	190.25
Black Redhorse	R	1	S	1	2	4.00	3.57	1.82	9.64	455.00
Golden Redhorse	R	1	S	M	8	16.00	14.29	4.07	21.54	254.13
River Redhorse [S]	R	1	s	1	1	2.00	1.79	0.70	3.71	350.00
Common Carp	G	0	M	T	2	4.00	3.57	5.45	28.87	1,362.50
Silver Chub	N	1	M		4	8.00	7.14	0.12	0.63	14.75
Emerald Shiner	N	1	M		18	36.00	32.14	0.07	0.36	1.89
Channel Catfish	F		C		1	2.00	1.79	0.08	0.43	41.00
Str. Bass X Wh. Bass	E				2	4.00	3.57	0.08	0.42	20.00
Smallmouth Bass	F	C	C	M	3	6.00	5.36	1.43	7.58	238.33
Bluegill Sunfish	S	1	C	P	1	2.00	1.79	0.24	1.27	120.00
Sauger	F	P	S		8	16.00	14.29	1.91	10.14	119.63
Walleye	F	P	s		1	2.00	1.79	0.09	0.48	45.00
Freshwater Drum -			M	P	1	2.00	1.79	1.30	6.87	648.00
	Mile :	Total			56	112.00		18.88		
	Numl	per of	Specie	S	13					
	Numl	per of	Hybrid	S	1					

River Code: 25-001 River Mile: 71.40 Time Fished: 2480 sec Dist Fished: 0.20 km	100000000000000000000000000000000000000	tion:	Ohio 1 24000 io Riv	.0 sq n	ni	No of Pa	asses: 1	Sample Date Ra Sample	nge: 10	996 /16/1996
Species Name / ODNR status			Breed		# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Gizzard Shad		0	М		1	5.00	1.14	1.04	0.79	208.00
Smallmouth Buffalo	C	1	М		2	10.00	2.27	10.70	8.13	1,070.00
Quillback	C	0	M		1	5.00	1.14	3.59	2.73	718.00
Black Redhorse	R	1	S	1	1	5.00	1.14	1.75	1.33	350.00
Golden Redhorse	R	1	S	M	12	60.00	13.64	9.05	6.87	150.75
Common Carp	G	0	M	T	6	30.00	6.82	39.13	29.71	1,304.17
Silver Chub	N	1	M		1	5.00	1.14	0.06	0.05	12.00
Emerald Shiner	N	1	M		11	55.00	12.50	0.16	0.12	2.91
Spottail Shiner	N	1	M	P	2	10.00	2.27	0.05	0.03	4.50
Channel Shiner	N	1	M	1	1	5.00	1.14	0.01	0.00	1.00
Channel Catfish	F		C		7	35.00	7.95	17.84	13.55	509.71
Flathead Catfish	F	P	C		1	5.00	1.14	0.76	0.58	152.00
White Bass	F	P	M		1	5.00	1.14	0.15	0.11	30.00
Str. Bass X Wh. Bass	E				1	5.00	1.14	0.15	0.11	30.00
Black Crappie	S	1	C		5	25.00	5.68	1.35	1.03	54.00
Smallmouth Bass	F	C	C	M	23	115.00	26.14	34.75	26.39	302.20
Spotted Bass	F	C	C		1	5.00	1.14	0.31	0.24	62.00
Bluegill Sunfish	S	1	C	P	1	5.00	1.14	0.40	0.30	79.00
Sauger	F	P	S		6	30.00	6.82	0.80	0.61	26.67
Logperch	D	1	S	M	1	5.00	1.14	0.06	0.05	12.00
Freshwater Drum			М	P	3	15.00	3.41	9.60	7.29	639.67
	Mile	Total			88	440.00		131.68		
	Numb	per of	Specie	S	20					
	Numb	er of I	Hybrid.	S	1					

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River Code: 25-001 River Mile: 70.86 Time Fished: 698 sec Dist Fished: 0.20 km		ion: age:	Ohio River 24000.0 sq n io River	ni	No of Pa	usses: 1	Sample Date Ra Sample		996 /16/1996 N
Species Name / ODNR status			Breed Guild Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Black Buffalo	C	1	M	1	5.00	5.56	4.80	19.60	960.00
Smallmouth Buffalo	C	1	M	2	10.00	11.11	7.08	28.91	708.00
Emerald Shiner	N	1	M	8	40.00	44.44	0.08	0.33	2.00
Channel Catfish	F		C	1	5.00	5.56	5.25	21.44	1,050.00
Str. Bass X Wh. Bass	E			3	15.00	16.67	0.48	1.94	31.67
Black Crappie	S	1	С	1	5.00	5.56	0.65	2.63	129.00
Sauger	F	P	S	1	5.00	5.56	1.95	7.96	390.00
Walleye	F	P	S	1	5.00	5.56	4.21	17.19	842.00
	Mile T	otal		18	90.00		24.49		
	Numb	er of	Species	7					
	Numb	er of	Hybrids	1					

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River Code: 25-001 River Mile: 70.00 Time Fished: 2460 sec Dist Fished: 0.50 km		ion: age: :	Ohio l 24000 io Riv	n pa 0.	ni	No of Pa		Sample Date Ra	nge: 10/	9 96 15/1996
Species			Bree		# of	Relative	% by	Relative	Type: N	
Name / ODNR status			Guild		Fish	Number	Number	Weight	Weight	Ave(gm) Weight
Gizzard Shad		0	М		2	4.00	3.57	0.82	3.98	205.00
Golden Redhorse	R	1	S	M	2	4.00	3.57	1.19	5.79	298.50
Shorthead Redhorse	R	1	S	M	4	8.00	7.14	3.17	15.39	396.75
River Redhorse [S]	R	1	S	1	1	2.00	1.79	0.40	1.94	200.00
River Chub	N	I	N	1	1	2.00	1.79	0.01	0.05	5.00
Silver Chub	N	1	M		1	2.00	1.79	0.03	0.13	13.00
Emerald Shiner	N	1	M		3	6.00	5.36	0.02	0.10	3.33
Channel Catfish	F		C		5	10.00	8.93	3.29	15.94	328.80
Flathead Catfish	F	P	C		1	2.00	1.79	0.56	2.72	280.00
Black Crappie	S	1	C		1	2.00	1.79	0.10	0.50	52.00
Rock Bass	S	C	C		1	2.00	1.79	0.32	1.54	159.00
Smallmouth Bass	F	C	C	M	19	38.00	33.93	5.57	27.00	146.58
Spotted Bass	F	C	C		1	2.00	1.79	0.02	0.12	12.00
Sauger	F	P	S		10	20.00	17.86	1.28	6.21	64.00
Walleye	· F	P	S		1	2.00	1.79	0.10	0.48	49.00
Freshwater Drum			М	P	3	6.00	5.36	3.74	18.13	623.33
	Mile T	otal			56	112.00		20.63		
	Numb	er of	Specie	es	16					
	Numb	er of	Hybrid	s	0					

	Drainage		N	umber of				Percent:					
River Mile	Area (sq mi)	Total Taxa	Mayfly Taxa	Caddisfly Taxa	Dipteran Taxa	Mayflies	Caddis- flies	Tany- tarsini	Other Dipt/NI	Tolerant Organisms	Qual. EPT	Eco- region	ICI
Ohio River	(25-001)								131-23- 35-10-1			-	
Year: 1996	1												
78.00 R	24000	23(4)	4(2)	2(2)	9(6)	1.2(2)	3.9(0)	0.0(0)	94.8(0)	34.1(0)	4(2)	4	18
76.70 R	24000	37(6)	7(6)	5(4)	16(6)	2.9(2)	3.3(0)	2.1(2)	91.5(0)	61.4(0)	2(0)	4	26
76.10 R	24000	27(4)	3(2)	5(4)	13(6)	0.8(2)	3.5(0)	9.9(6)	85.9(0)	58.8(0)	4(2)	4	26
75.60 R	24000	25(4)	3(2)	3(2)	12(6)	1.9(2)	5.2(2)	1.5(2)	91.3(0)	25.9(0)	5(2)	4	22
71.80 R	24000	28(4)	2(0)	2(2)	18(6)	1.8(2)	2.7(0)	0.5(2)	95.0(0)	46.7(0)	0(0)	4	16
70.00 R	24000	29(4)	3(2)	5(4)	14(6)	2.2(2)	7.6(2)	12.5(6)	77.7(0)	18.7(0)	1(0)	4	26

IBI table for sites near Brilliant

					Num	Number of				Perce	Percent of Individuals	viduals			Rel.No.		
River Mile	Type	River Mile Type Date	Drainage area (sq mi)	Total species	Sunfish species	Sucker Intolerant species species	ntolerant	Rnd-bodied Simple suckers Lithophils	Simple Lithophils	Tolerant fishes	Omni- vores	Top	Insect- ivores	DELT	tolerants /(1.0 km)	181	Modified
Ohio River - (25-001)	er - (2	25-001)															
Year: 1996	966							***									
78.50	z	9661/91/01 N	24000	12(3)	3(3)	1(1)	0(1)	0(1)	4(1)	4(5)	19(3)	35(5)	25(1)	6.3(1)	92(1)	26	8.1
77.00	Z	N 10/16/1996	24000	20(3)	3(3)	4(3)	1(1)	2(1)	11(5)	13(5)	20(3)	35(5)	30(3)	12.2(1)	142(1)	34	9.8
76.50	Z	9661/91/01 N	24000	17(3)	2(3)	3(3)	0(1)	2(1)	33(5)	(5)9	21(3)	28(5)	44(3)	5.6(1)	408(3)	36	9.6
76.20	z	N 10/16/1996	24000	13(3)	1(1)	2(1)	0(1)	2(1)	30(5)	13(5)	32(1)	26(5)	26(1)	11.3(1)	92(1) *	26	7.5
75.50	Z	N 10/17/1996	24000	13(3)	1(1)	1(1)	0(1)	0(1)	25(5)	5(5)	21(3)	19(5)	21(1)	5.3(1)	108(1)	28	9.9
71.70	Z	N 10/16/1996	24000	12(3)	1(1)	3(3)	2(3)	20(3)	68(5)	4(5)	11(5)	21(5)	61(5)	3.6(3)	* (1)801	42	7.7
71.40	z	9661/91/01 N	24000	19(3)	2(3)	4(3)	2(3)	15(1)	35(5)	7(5)	9(5)	36(5)	42(3)	8.0(1)	410(3)	40	9.6
70.86	Z	N 10/16/1996	24000	7(1)	1(1)	2(1)	0(1)	0(1)	56(5)	0(5)	0(5)	11(5)	67(5)	16.7(1)	• (1)06	32	8.9
70.00	Z	N 10/15/1996	24000	16(3)	2(3)	3(3)	2(3)	13(1)	38(5)	0(5)	4(5)	59(5)	23(1)	8.9(1)	112(1)	36	8.1

• - IBI is low end adjusted.
• - < 200 Total individuals in sample
** - < 50 Total individuals in sample

Ohio EPA/DSW Ecological Assessment Section Macroinvertebrate Collection

01801 Turbellaria 37 03360 Plumatella sp + 03600 Oligochaeta 224 08260 Orconectes (Crokerinus) sanbornii sanbornii + 13400 Stenacron sp 1 13570 Maccaffertium terminatum 2 16700 Tricorythodes sp 11 17200 Caenis sp 2 23300 Argia sp + 27404 Neurocordulia molesta 1 49200 Climacia sp + 51206 Cyrnellus fraternus 16 + 53800 Hydroptila sp 35 + 77130 Ablabesmyia rhamphe group 61 80 80427 Cricotopus (C) politus 80 80 81240 Nanocladius (N) distinctus 25 81631 Parakiefferiella n.sp 1 31 82730 Chironomus (C.) decorus group + 83040 Dicrotendipes neomodestus 98 84400 Stenochironomus sp 31 84700 Stenochironomus sp 74 94	Taxa Code	Taxa	Quant/0	Qual	Taxa Code	Taxa	Quant/Qua
01801 Turbellaria 37 + 03360 Plumatella sp + 03600 Oligochaeta 224 06810 Gammarus fasciatus 249 08260 Orconectes (Crokerinus) sanbornii sanbornii + 13400 Stenacron sp 1 13570 Maccaffertium terminatum 2 16700 Tricorythodes sp 11 17200 Caenis sp 2 23404 Neurocordulia molesta 1 49200 Climacia sp + 51206 Cyrnellus fraternus 16 53800 Hydropiila sp 35 77130 Ablabesmyia rhamphe group 61 80427 Cricotopus (C) politus 80 81240 Nanocladius (N) distinctus 25 81631 Parakiefferiella n.sp 1 31 82730 Chironomus (C) decorus group + 83040 Dicrotendipes neomodestus 98 84400 Polypedilum (P.) illinoense 147 84700 Stenochironomus sp 74 99300 Ferrissia sp<	00401	Spongillidae	10.000	+			
10360 Plumatella sp	1320	Hydra sp	88				
03600 Oligochaeta 224 06810 Gammarus fasciatus 249 08260 Orconectes (Crokerinus) sanbornii sanbornii + 13400 Stenacron sp 1 + 13570 Maccaffertium terminatum 2 - 16700 Tricorythodes sp 11 + 17200 Caenis sp 2 - 22300 Argia sp + 27404 Neurocordulia molesta 1 49200 Climacia sp + 51206 Cyrnellus fraternus 16 + 51206 Cyrnellus fraternus 16 + 77130 Ablabesmyia rhamphe group 61 8 80427 Cricotopus (C.) politus 80 81631 Parakiefferiella n.sp I 31 82730 Chironomus (C.) decorus group + 83040 Dicrotendipes lucifer 43 84470 Polypedilum (P.) illinoense 147 84700 Stenochironomus sp 31 84960 Pseudochironomus sp 31 849900 Fer	1801	Turbellaria	37	+			
06810 Gammarus fasciatus 249 + 08260 Orconectes (Crokerinus) sanbornii sanbornii + 13400 Stenacron sp 1 + 13570 Maccaffertium terminatum 2 16700 Tricorythodes sp 11 + 17200 Caenis sp 2 22300 Argia sp + 27404 Neurocordulia molesta 1 49200 Climacia sp + 51206 Cyrnellus fraternus 16 + 53800 Hydroptila sp 35 + 77130 Ablabesmyia rhamphe group 61 80 80427 Cricotopus (C.) politus 80 81240 Nanocladius (N.) distinctus 25 81631 Parakiefferiella n.sp 1 31 82730 Chironomus (C.) decorus group + 83040 Dicrotendipes lucifer 43 84470 Polypedilum (P.) illinoense 147 84700 Stenochironomus sp 31 84960 Pseudochironomus sp 74 93200 Hydrobiidae	3360	Plumatella sp		+			
08260 Orconectes (Crokerinus) sanbornii sanbornii + 13400 Stenacron sp 1 13570 Maccaffertium terminatum 2 16700 Tricorythodes sp 11 17200 Caenis sp 2 22300 Argia sp + 27404 Neurocordulia molesta 1 49200 Climacia sp + 51206 Cyrnellus fraternus 16 + 53800 Hydroptila sp 35 + 77130 Ablabesmyia rhamphe group 61 80 80427 Cricotopus (C.) politus 80 81240 Nanocladius (N.) distinctus 25 81631 Parakiefferiella n.sp 1 31 82730 Chironomus (C.) decorus group + 83040 Dicrotendipes lucifer 43 84470 Polypedilum (P.) illinoense 147 84700 Stenochironomus sp 31 84960 Pseudochironomus sp 74 93200 Hydrobiidae 1 96900 Ferrissia sp 50 + <td>3600</td> <td>Oligochaeta</td> <td>224</td> <td></td> <td></td> <td></td> <td></td>	3600	Oligochaeta	224				
13400 Stenacron sp 1 + 13570 Maccaffertium terminatum 2 16700 Tricorythodes sp 11 + 17200 Caenis sp 2 22300 Argia sp + 27404 Neurocordulia molesta 1 49200 Climacia sp + 51206 Cyrnellus fraternus 16 53800 Hydroptila sp 35 77130 Ablabesmyia rhamphe group 61 80427 Cricotopus (C,) politus 80 81240 Nanocladius (N,) distinctus 25 81631 Parakiefferiella n.sp I 31 82730 Chironomus (C,) decorus group + 83040 Dicrotendijes neomodestus 98 84470 Polypedilum (P,) illinoense 147 84700 Stenochironomus sp 31 84960 Pseudochironomus sp 74 93200 Hydrobiidae 1 96500 Ferrissia sp 50	06810	Gammarus fasciatus	249	+			
13400 Stenacron sp 1 + 13570 Maccaffertium terminatum 2 16700 Tricorythodes sp 11 + 17200 Caenis sp 2 22300 Argia sp + 27404 Neurocordulia molesta 1 49200 Climacia sp + 51206 Cyrnellus fraternus 16 53800 Hydroptila sp 35 77130 Ablabesmyia rhamphe group 61 80427 Cricotopus (C,) politus 80 81240 Nanocladius (N,) distinctus 25 81631 Parakiefferiella n.sp I 31 82730 Chironomus (C,) decorus group + 83040 Dicrotendijes neomodestus 98 84470 Polypedilum (P,) illinoense 147 84700 Stenochironomus sp 31 84960 Pseudochironomus sp 74 93200 Hydrobiidae 1 96500 Ferrissia sp 50	08260	Orconectes (Crokerinus) sanbornii sanbornii		+			
13570 Maccaffertium terminatum 2 16700 Tricorythodes sp 11 17200 Caenis sp 2 22300 Argia sp + 27404 Neurocordulia molesta 1 49200 Climacia sp + 51206 Cyrnellus fraternus 16 53800 Hydroptila sp 35 77130 Ablabesmyia rhamphe group 61 80427 Cricotopus (C.) politus 80 81240 Nanocladius (N.) distinctus 25 81631 Parakiefferiella n.sp 1 31 82730 Chironomus (C.) decorus group + 83040 Dicrotendipes neomodestus 98 84470 Polypedilum (P.) illinoense 147 84700 Stenochironomus sp 31 84960 Pseudochironomus sp 74 93200 Hydrobiidae 1 96900 Ferrissia sp 50	13400		1	+			
16700 Tricorythodes sp 11 + 17200 Caenis sp 2 22300 Argia sp + 27404 Neurocordulia molesta 1 49200 Climacia sp + 51206 Cyrnellus fraternus 16 53800 Hydroptila sp 35 77130 Ablabesmyia rhamphe group 61 80427 Cricotopus (C.) politus 80 81240 Nanocladius (N.) distinctus 25 81631 Parakiefferiella n.sp 1 31 82730 Chironomus (C.) decorus group + 83040 Dicrotendipes neomodestus 98 843050 Dicrotendipes lucifer 43 84470 Polypedilum (P.) illinoense 147 84700 Stenochironomus sp 31 84960 Pseudochironomus sp 74 93200 Hydrobiidae 1 96900 Ferrissia sp 50	13570						
17200 Caenis sp 2 22300 Argia sp + 27404 Neurocordulia molesta 1 49200 Climacia sp + 51206 Cyrnellus fraternus 16 53800 Hydroptila sp 35 77130 Ablabesmyla rhamphe group 61 80427 Cricotopus (C.) politus 80 81240 Nanocladius (N.) distinctus 25 81631 Parakiefferiella n.sp 1 31 82730 Chironomus (C.) decorus group + 83040 Dicrotendipes neomodestus 98 84470 Polypedilum (P.) illinoense 147 84700 Stenochironomus sp 31 84960 Pseudochironomus sp 74 93200 Hydrobiidae 1 96900 Ferrissia sp 50				+			
23300 Argia sp	17200		2				
27404 Neurocordulia molesta 1 49200 Climacia sp + 51206 Cyrnellus fraternus 16 53800 Hydroptila sp 35 77130 Ablabesmyla rhamphe group 61 80427 Cricotopus (C.) politus 80 81240 Nanocladius (N.) distinctus 25 81631 Parakiefferiella n.sp 1 31 82730 Chironomus (C.) decorus group + 83040 Dicrotendipes neomodestus 98 83050 Dicrotendipes lucifer 43 84470 Polypedilum (P.) illinoense 147 84700 Stenochironomus sp 31 84960 Pseudochironomus sp 74 93200 Hydrobiidae 1 96900 Ferrissia sp 50				+			
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16	9200			+			
53800 Hydroptila sp 35 + 77130 Ablabesmyia rhamphe group 61 80427 Cricotopus (C.) politus 80 81240 Nanocladius (N.) distinctus 25 81631 Parakiefferiella n.sp 1 31 82730 Chironomus (C.) decorus group + 83040 Dicrotendipes neomodestus 98 83050 Dicrotendipes lucifer 43 84470 Polypedilum (P.) illinoense 147 84700 Stenochironomus sp 31 84960 Pseudochironomus sp 74 93200 Hydrobiidae 1 96900 Ferrissia sp 50	51206		16	+			
77130 Ablabesmyia rhamphe group 61 80427 Cricotopus (C.) politus 80 81240 Nanocladius (N.) distinctus 25 81631 Parakieffierilla n.sp 1 31 82730 Chironomus (C.) decorus group + 83040 Dicrotendipes neomodestus 98 83050 Dicrotendipes lucifer 43 84470 Polypedilum (P.) illinoense 147 84700 Stenochironomus sp 31 84960 Pseudochironomus sp 74 93200 Hydrobiidae 1 96900 Ferrissia sp 50	3800		35	+			
80427 Cricotopus (C.) politus 80 81240 Nanocladius (N.) distinctus 25 81631 Parakiefferiella n.sp 1 31 82730 Chironomus (C.) decorus group + 83040 Dicrotendipes neomodestus 98 83050 Dicrotendipes lucifer 43 84470 Polypedilum (P.) illinoense 147 84700 Stenochironomus sp 31 84960 Pseudochironomus sp 74 93200 Hydrobiidae 1 96900 Ferrissia sp 50							
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81631 Parakiefferiella n.sp 1 31 82730 Chironomus (C.) decorus group + 83040 Dicrotendipes neomodestus 98 83050 Dicrotendipes lucifer 43 84470 Polypedilum (P.) illinoense 147 84700 Stenochironomus sp 31 84960 Pseudochironomus sp 74 93200 Hydrobiidae 1 96900 Ferrissia sp 50			25				
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83040 Dicrotendipes neomodestus 98 83050 Dicrotendipes lucifer 43 84470 Polypedilum (P.) illinoense 147 84700 Stenochironomus sp 31 84960 Pseudochironomus sp 74 93200 Hydrobiidae 1 96900 Ferrissia sp 50				+			
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84470 Polypedilum (P.) illinoense 147 84700 Stenochironomus sp 31 84960 Pseudochironomus sp 74 93200 Hydrobildae 1 96900 Ferrissia sp 50		The state of the s					
84700 Stenochironomus sp 31 84960 Pseudochironomus sp 74 93200 Hydrobildae 1 96900 Ferrissia sp 50							
84960 Pseudochironomus sp 74 93200 Hydrobiidae 1 96900 Ferrissia sp 50 +							
93200 Hydrobiidae 1 96900 Ferrissia sp 50 +							
96900 Ferrissia sp 50 +							
		The second secon		+			
97001 Bivalvia 1	7001	Bivalvia	1				
No. Quantitative Taxa: 23 Total Taxa: 29	No. Q	ruantitative Taxa: 23 Total T	`axa: 29				

Ohio EPA/DSW Ecological Assessment Section Macroinvertebrate Collection

Taxa				Taxa			
Code	Taxa	Quant/0	Qual	Code	Taxa	Qu	ant/Qua
01320	Hydra sp	23					
01801	Turbellaria	32		No. Ouar	ntitative Taxa: 37	Total Taxa:	42
3600	Oligochaeta	992	+		itative Taxa: 13	ICI:	
06810	Gammarus fasciatus	109	+				
08601	Hydrachnidia .	16		Number	of Organisms: 1704	Qual EPT:	2
13400	Stenacron sp	23			.40.		
13540	Maccaffertium mediopunctatum	5		i.			
13550	Maccaffertium mexicanum integrum	4					
13561	Maccaffertium pulchellum	5					
13570	Maccaffertium terminatum	2					
16700	Tricorythodes sp	7	+				
17200	Caenis sp	4	+				
22001	Coenagrionidae		+				
26700	Macromia sp		+				
27404	Neurocordulia molesta	2	+				
51206	Cyrnellus fraternus	. 10					
1300	Neureclipsis sp	2					
52200	Cheumatopsyche sp .	6					
3800	Hydroptila sp	38					
9400	Nectopsyche sp	1					
8700	Dubiraphia sp		+				
7130	Ablabesmyia rhamphe group	74					
7750	Hayesomyia senata or Thienemannimyia norena	31					
0410	Cricotopus (C.) sp	8					
0420	Cricotopus (C.) bicinctus	4					
0427	Cricotopus (C.) politus	62					
0430	Cricotopus (C.) tremulus group		+				
1240	Nanocladius (N.) distinctus	23					
3040	Dicrotendipes neomodestus	27	+				
3050	Dicrotendipes lucifer	31					
3300	Glyptotendipes (G.) sp	4					
4010	Parachironomus "abortivus" (sensu Simpson & Bode, 1980)	4					
4450	Polypedilum (Uresipedilum) flavum	1					
4470	Polypedilum (P.) illinoense	8	+				
4540	Polypedilum (Tripodura) scalaenum group		+				
4700	Stenochironomus sp	62					
4960	Pseudochironomus sp	4					
5625	Rheotanytarsus sp	23					
5814	Tanytarsus glabrescens group	12					
3200	Hydrobiidae	6					
	Ferrissia sp	20					
	Corbicula fluminea	19	2				

Ohio EPA/DSW Ecological Assessment Section Macroinvertebrate Collection

Taxa			3/	Taxa		
Code	Таха	Quant/0	Qual	Code	Taxa	Quant/Qua
00401	Spongillidae		+			
01320	Hydra sp	176				
01801	Turbellaria	296	+			
03360	Plumatella sp		+			
03600	Oligochaeta	4800	+			
04901	Erpobdellidae		+			
05800	Caecidotea sp		+			
06810	Gammarus fasciatus	480	+			
13400	Stenacron sp .	2	+			
16700	Tricorythodes sp	51	+			
L7200	Caenis sp	16				
24710	Dromogomphus spinosus		+			
27404	Neurocordulia molesta		+			
19200	Climacia sp		+			
51206	Cyrnellus fraternus	48	+			
51300	Neureclipsis sp	3				
52200	Cheumatopsyche sp	70				
52520	Hydropsyche bidens	16				
3800	Hydroptila sp	177	+			
9400	Stenelmis sp		+			
77130	Ablabesmyia rhamphe group	59				
0420	Cricotópus (C.) bicinctus	118				
0427	Cricotopus (C.) politus	385				
0430	Cricotopus (C.) tremulus group	30				
31240	Nanocladius (N.) distinctus	30				
3040	Dicrotendipes neomodestus	89				
3050	Dicrotendipes lucifer	178				
4470	Polypedilum (P.) illinoense	355				
4540	Polypedilum (Tripodura) scalaenum group		+			
4700	Stenochironomus sp	267				
4960	Pseudochironomus sp	385				
5625	Rheotanytarsus sp	859				
5814	Tanytarsus glabrescens group	30				
7540	Hemerodromia sp	26				
3200	Hydrobiidae	2	+			
6120	Menetus (Micromenetus) dilatatus	72				
	uantitative Taxa: 27 Total 7	Гаха: 36				

Ohio EPA/DSW Ecological Assessment Section Macroinvertebrate Collection

Taxa Code	Taxa	Quant/0	Jual	Taxa Code	Taxa	Quant/Qual
00401	Spongillidae	Quanto		Code	Taxa	Quant/Quan
01200	Cordylophora lacustris	1	+			
01320	Hydra sp	1648				
01801	Turbellaria	207	+			
03600	Oligochaeta	704	+			
05800	Caecidotea sp	704	+			
06810	Gammarus fasciatus	328	+			
13400	Stenacron sp	21				
13550	Maccaffertium mexicanum integrum	21				
13570	Maccaffertium terminatum	1	+			
16700	Tricorythodes sp	67	+			
22300	Argia sp	6,	+			
27406	Neurocordulia obsoleta		1374			
51206	Cyrnellus fraternus	7	+			
52200	Cheumatopsyche sp	19				
53800	Hydroptila sp	213	+			
58901	Macronychus glabratus	1				
77130	Ablabesmyia rhamphe group	56				
77750	Hayesomyia senata or Thienemannimyia norena	14				•
30420	Cricotopus (C.) bicinctus	139				
0427	Cricotopus (C.) politus	237				
1240	Nanocladius (N.) distinctus	83				
3040	Dicrotendipes neomodestus	125				
3050	Dicrotendipes lucifer	70				
4470	Polypedilum (P.) illinoense	264	+			
4960	Pseudochironomus sp	223				
5625	Rheotanytarsus sp	42				
5814	Tanytarsus glabrescens group	28				
7540	Hemerodromia sp	1				
3200	Hydrobiidae	97	+			
7710	Dreissena polymorpha		+			
No. Q	uantitative Taxa: 25 Total Tax	axa: 31	_			
No. Q	ualitative Taxa: 15	CI: 22				
	er of Organisms: 4596 Qual E					

Ohio EPA/DSW Ecological Assessment Section Macroinvertebrate Collection

Collection Date: 09/17/1996 River Code: 25-001 RM: 71.80 R

Taxa	т-	0	Taxa		
Code	Taxa	Quant/Qua	Code	Taxa	Quant/Qua
01320	Hydra sp	804			
01801	Turbellaria	83			
03360	Plumatella sp	121			
03600	Oligochaeta	1392			
06810	Gammarus fasciatus	296 +			
13400	Stenacron sp	1			
16700	Tricorythodes sp	59			
52520	Hydropsyche bidens	41			
53800	Hydroptila sp	48			
77130	Ablabesmyia rhamphe group	24			
77750	Hayesomyia senata or Thienemannimyia norena	28			
80410	Cricotopus (C.) sp	4			
80427	Cricotopus (C.) politus	73			
80430	Cricotopus (C.) tremulus group	12 '			
80500	Cricotopus (Isocladius) reversus group	4			
81231	Nanocladius (N.) crassicornus or N. (N.) "rectinervis"	4			
81240	Nanocladius (N.) distinctus	40			
81631	Parakiefferiella n.sp 1	4			
82820	Cryptochironomus sp	+			
83040	Dicrotendipes neomodestus	16			
B3050	Dicrotendipes lucifer	16			
B3300	Glyptotendipes (G.) sp	4			
84450	Polypedilum (Uresipedilum) flavum	4			
84470	Polypedilum (P.) illinoense	95 +			
34700	Stenochironomus sp	28			
35625	Rheotanytarsus sp	12			
35814	Tanytarsus glabrescens group	4			
37540	Hemerodromia sp	1			
93200	Hydrobiidae	52			
No. Q	uantitative Taxa: 28 Total	Taxa: 29	-		
No. Q	ualitative Taxa: 3	ICI: 16			
Numb	er of Organisms: 3270 Qua	EPT: 0			

Ohio EPA/DSW Ecological Assessment Section Macroinvertebrate Collection

Collection Date: 09/24/1996 River Code: 25-001 RM: 70.00 R

Taxa				Taxa		
Code	Taxa	Quant/Q	Qual	Code	Taxa	Quant/Qu
01320	Hydra sp	144				
01801	Turbellaria	178				
03600	Oligochaeta	75	+			
06810	Gammarus fasciatus	194	+			
08230	Orconectes (Crokerinus) obscurus		+			
08601	Hydrachnidia	10				
13400	Stenacron sp	13				
13561	Maccaffertium pulchellum	1				
16700	Tricorythodes sp	23				
24710	Dromogomphus spinosus		+			
27404	Neurocordulia molesta		+			
51206	Cyrnellus fraternus	15				
52200	Cheumatopsyche sp	64				
52560	Hydropsyche orris	3				
52801	Potamyia flava	31	+			
53800	Hydroptila sp	14				
77500	Conchapelopia sp	7				
80410	Cricotopus (C.) sp	13				
80420	Cricotopus (C.) bicinctus	20				
80427	Cricotopus (C.) politus	39				
82100	Thienemanniella sp	2				
83040	Dicrotendipes neomodestus	46				
83050	Dicrotendipes lucifer	72				
84450	Polypedilum (Uresipedilum) flavum	20				
84470	Polypedilum (P.) illinoense	202				
B4700	Stenochironomus sp	46				
85625	Rheotanytarsus sp	189				
85814	Tanytarsus glabrescens group	13				
85840	Tanytarsus sepp	7				
B7540	Hemerodromia sp	13				
93200	Hydrobiidae	205	+			
96900	Ferrissia sp	16				
No. Q	uantitative Taxa: 29 To	otal Taxa: 32				
No. C	ualitative Taxa: 7	ICI: 26				
SECTION SE	to one particular and the second	ual EPT: 1				



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services 4625 Morse Road, Suite 104 Columbus, Ohio 43230 (614) 416-8993 / FAX (614) 416-8994

April 27, 2012

Gregory Bailey West Virginia Department of Transportation 1900 Kanawha Boulevard East Building 5, Room 110 Charleston, West Virginia 25305-0430

Tails: 31420-2011-TA-0895

Re:

Jefferson County, Ohio; Proposed Ohio River Bridge Project

State Project No. S205-2/23-0.00 00 Federal Project No. HPP-0223(003)D

Dear Mr. Bailey:

This is in response to your July 20, 2011 letter requesting information about possible impacts on federally threatened or endangered species at the proposed site of the Ohio River Bridge project. The proposed project includes a bridge that spans the Ohio River and connects WV 2 with OH SR 7. The comments in this letter only pertain to parts of the project that will occur in Ohio.

Our office has been informed by the Ohio Department of Transportation (ODOT) that the West Virginia Department of Transportation (WVDOT) is the lead state transportation agency for this project and that ODOT will not be coordinating this project with our office. Therefore, we request that WVDOT consult with our office on all anticipated impacts to any federally listed species of concern in Ohio, including impacts to species that may occur in the Ohio River. In addition, we request that our office be copied on all consultations between WVDOT and the Service's West Virginia Field Office in Elkins, WV.

There are no Federal wilderness areas, or designated Critical Habitat within the vicinity of the proposed site. The project site is within 1 mile of the Ohio River Islands National Wildlife Refuge.

We recommend that proposed developments avoid and minimize water quality impacts and impacts to high quality fish and wildlife habitat, such as forests, streams, and wetlands. Best construction techniques should be used to minimize erosion, particularly on slopes. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. In addition, we support and recommend mitigation activities that reduce the likelihood of invasive plant spread and encourage native plant colonization. Prevention of non-native, invasive plant

establishment is critical in maintaining high quality habitats. All disturbed areas in the project vicinity should be mulched and re-vegetated with native plant species. Staging areas should be kept well away from streams and wetlands, and construction areas should be quickly replanted with native vegetation following construction.

Furthermore, due to the potential impact on important fish communities and aquatic habitat, the Ohio Division of Natural Resources does not permit in-water work for the Ohio River during the period of March 15 to June 30; any in-water work should occur outside of these dates.

ENDANGERED SPECIES COMMENTS: The proposed project lies within the range of the **Indiana bat** (*Myotis sodalis*), a federally listed endangered species. Due to the project type, location, and lack of suitable habitat, this species would not be expected within the project area (in Ohio), and no impact to this species is expected. Relative to this species, this precludes the need for further action on this project in Ohio.

The proposed project lies within the range of the **sheepnose** (*Plethobasus cyphyus*) and the **snuffbox** (*Epioblasma triquetra*), two federally listed endangered species. Based on previous Ohio River mussel surveys near the project site, it is unlikely that these two species would be present in the project area. However, we recommend that the Ohio Division of Natural Resources, Division of Wildlife be contacted regarding any state of Ohio listed species that may be present in the project area.

The proposed project lies within the range of the **eastern hellbender** (*Cryptobranchus a. alleganiensis*), a Federal amphibian species of concern and an Ohio endangered species. The eastern hellbender is a salamander that inhabits perennial streams with large, flat rocks. Should the proposed project directly or indirectly impact any of the habitat types described above, we recommend that a survey be conducted to determine the presence or probable absence of the eastern hellbender in the vicinity of the proposed project site. The following herpetologists are authorized to conduct hellbender surveys within the State of Ohio:

Jeff Davis	Greg Lipps	Doug Wynn
625 Crescent Road	1473 County Road 5-2	2375 Cross Creek Court
Hamilton, OH 45013	Delta, OH 43515	Lewis Center, OH 43035
anura@fuse.net	GregLipps@aol.com	Sistrurus@aol.com
(513) 868-3154	(419) 376-3441	(614) 306-0313

BALD EAGLE COMMENTS: The project lies within the range of the **bald eagle** (*Haliaeetus leucocephalus*), a species protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Due to the project type, location, and onsite habitat, this species would not be expected within the project area, and no impact to this species is expected in Ohio. Relative to this species, this precludes the need for further action on this project in Ohio.

Should additional information on listed or proposed species or their critical habitat become available or if new information reveals effects of the action that were not previously considered, our comments and recommendations may be reconsidered. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C.

661 et seq.), the Endangered Species Act of 1973 (ESA), as amended, and are consistent with the intent of the National Environmental Policy Act of 1969 and the U. S. Fish and Wildlife Service's Mitigation Policy.

If you have questions, or if we may be of further assistance in this matter, please contact Sarah Bowman at extension 18 in this office, or through email at sarah bowman@fws.gov.

Sincerely,

Mary Knapp, Ph.D.

Field Supervisor

cc: ODNR, DOW, SCEA Unit, Columbus, OH (email only)

ODNR, John Navarro (email only) USFWS Ohio River Islands NWR

OEPA, Columbus, OH (email only)

USACE, Ohio Regulatory Transportation Office, Columbus, OH (email only)

Elizabeth Stout, USFWS West Virginia Field Office (email only)

Traci Cummings, WVDOT (email only)

Keith A. Johnson

From:

Angela Boyer@fws.gov

Sent:

Monday, June 13, 2011 11:22 AM

To:

Keith A. Johnson

Cc: Subject: Karen_Hallberg@fws.gov Re: Ohio River Bridge Crossing

Keith,

As your information indicates, there is no Indiana bat habitat on the Ohio side of the project area (no forested areas). Therefore, an Indiana bat on the Ohio side is not necessary.

Angie

"Keith A. Johnson" <kjohnson@mtnstatebio.com>

"Keith A. Johnson"

<kjohnson@mtnstatebio.com>

To<angela_boyer@fws.gov>

06/07/2011 08:43 AM

cc

SubjectOhio River Bridge Crossing

Angela,

The WV Department of Highways is proposing to construct a bridge across the Ohio River at Brooke County, WV and Jefferson County, Ohio. I have attached some mapping that shows the area being proposed. One map shows different alternatives while the other combines all alternatives together. I will be conducting a mist net survey for this project and have already talked with WV USFWS office. As you will see there are forested areas that could be potential Indian Bat habitat on the WV side but no Indiana Bat habitat on the OH side due to residential development, industrial development, highways, etc (no forested areas). We are proposing to conduct mist net surveys on the WV side but due to insufficient habitat no mist net surveys are being proposed on the OH side. If you concur please send verification of your approval. If you have questions please contact my mobile number.

Sincerely,

Keith

Keith A. Johnson Chief Biologist/Owner Mountain State Biosurveys, LLC 6703 Ohio River Road Lesage, WV 25537 Office (304)762-2453 Mobile (304)544-5404 www.mtnstatebio.com

1

Staud, Amy

Subject:

FW: WVRt 2 bridge

AMServiceURLStr:

https://Slingshot.hdrinc.com/CFSS/control?view=services/FTService

From: Facemire, Lovell R [mailto:Lovell.R.Facemire@wv.gov]

Sent: Wednesday, May 04, 2011 6:08 PM

To: Staud, Amy

Subject: FW: WVRt 2 bridge

fyi

From: barbara Douglas@fws.gov [mailto:barbara Douglas@fws.gov]

Sent: Tue 3/30/2010 1:19 PM To: Facemire, Lovell R Subject: WVRt 2 bridge

Hi Lovell - The Ohio River in Brooke County is within the historic range of endangered mussels, but we don't have current records that high up. The project is therefore not likely to adversely affect endangered mussel species, but there could be state protected mussels. You should coordinate with Janet C. regarding her survey requirements for the project.

Barb



United States Department of the Interior

FISH AND WILDLIFE SERVICE

West Virginia Field Office 694 Beverly Pike Elkins, West Virginia 26241

August 17, 2009



Mr. Gregory Bailey West Virginia Department of Transportation Division of Highways 1900 Kanawha Blvd. East Building Five, Room 110 Charleston, West Virginia 25305-0430

Re: Ohio River Bridge Crossing, West Virginia Route 2, Brooke County, West Virginia

Dear Mr. Bailey:

This responds to your information request of April 8, 2009, regarding the potential impacts on federally-listed endangered and threatened species and species of concern. These comments are provided pursuant to the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

The proposed project crosses the Ohio River, known to contain the federally-endangered pink mucket pearly mussel (*Lampsilis abrupta*) and fanshell mussel (*Cyprogenia stegaria*), and one candidate species, the sheepnose mussel (*Plethobasus cyphyus*). To determine if any mussel populations will be affected, the U.S. Fish and Wildlife Service (Service) recommends that a mussel survey be conducted wherever any portion of the proposed project occurs within the Ohio River. The survey should be conducted by a malacologist with qualifications acceptable to the Service and the West Virginia Division of Natural Resources (WVDNR). The malacologist should submit a survey plan to the Service and the WVDNR for review and concurrence prior to conducting the work, and must have a valid scientific collecting permit from the WVDNR. A list of potential surveyors is included for your convenience. If any federally-listed species or high quality mussel populations are found, further coordination with this office will be required to develop measures that will avoid and minimize any impacts to fish and wildlife resources.

In addition, the endangered Indiana bat, (*Myotis sodalis*) could conceivably be adversely affected by the project proposal. The Indiana bat may use the project area for foraging and roosting between April 1 and November 15. Indiana bat summer foraging habitats are generally defined as riparian, bottomland, or upland forest, and old fields or pastures with scattered trees.

Mr. Gregory Bailey August 17, 2009 2

Roosting/maternity habitat consists primarily of live or dead hardwood tree species which have exfoliating bark that provides space for bats to roost between the bark and the bole of the tree. Tree cavities, crevices, splits, or hollow portions of tree boles and limbs also provide roost sites.

The Service has determined the number of acres of suitable foraging and roosting habitat on the West Virginia landscape available to each Indiana bat, versus the total acreage of forest. On that basis, we have determined that small projects greater than a five-mile radius from a hibernaculum or known capture site, affecting 17 acres or less of suitable forested habitat will have a very small chance of resulting in direct or indirect take of the species, and therefore these effects are considered discountable.

If less than 17 acres of Indiana bat maternity habitat will be impacted by this project, then no further consultation under the Endangered Species Act is required for this species. If more than 17 acres will be disturbed, then you should contact this office to discuss project options.

If you have any questions regarding this letter, please contact Ms. Barbara Douglas of my staff, at (304) 636-6586, or at the letterhead address.

Sincerely,

Deborah Carter Field Supervisor

Deborah Carty

Enclosure: Mussel Surveyors

Qualified Freshwater Mussel Surveyors *

Updated July 2007

Ecological Specialists, Inc. Contact: Heidi Dunn 1417 Hoff Industrial Drive O'Fallon, MO 63366 phone: 636-281-1982

email:

hdunn@ecologicalspecialists.com (SCUBA and snorkle surveys)

Ecological Specialists, Inc.
Contact: Chuck Howard
470-A Schrock Road
Columbus, OH 43229
phone: 614-430-3780
fax: 614-430-3781
email:
choward@ecologicalspecialists.com
(SCUBA and snorkle surveys)

EnviroScience, Inc. Contact: Greg Zimmerman 3781 Darrow Road Stow, OH 44224 phone: 330-688-0111 fax: 330-688-3858

email:

gzimmerman@enviroscienceinc.com (SCUBA and snorkie surveys) McClane Environmental Services Contact: Brent McClane

10566 Decker Avenue St. Louis, MO 63114 phone: 314-890-8524 fax: 314-427-3113

email: bmcclane@swbell.net (SCUBA and snorkle surveys)

Dr. Michael Hoggarth Otterbein College Science Hall 306 Westerville, OH 43081 phone: 614-823-1667

Allegheny Consulting Bill Tolin Route 3, Box 142 Elkins, WV 26241 phone: 304-636-6004 email: wtolin@cebridge.net

(Snorkle surveys)

Note: Due to the depth of the rivers, surveys on the Ohio and Kanawha Rivers must be conducted by SCUBA

^{*} This list includes *individuals* who are qualified to conduct surveys for freshwater mussels, this list may not include all individuals qualified to conduct such surveys. Inclusion of names on this list does not constitute endorsement by the WV Division of Natural Resources (WVDNR), the US Fish and Wildlife Service, nor any other government agency. A WV Scientific Collecting Permit will be required from the WVDNR to sample mussels in WV.



DIVISION OF NATURAL RESOURCES

Wildlife Resources Section
Operations Center
P.O. Box 67
Elkins, West Virginia 26241-3235
Telephone (304) 637-0245
Fax (304) 637-0250

April 16, 2009

APR 2 0 2009

ENGINEERING DIVISION WY DOH

Frank Jezioro Director

Joe Manchin III Governor

> Mr. Gregory L. Bailey Division of Highways 1900 Kanawha Boulevard, East Building Five, Room 110 Charleston, WV 25305-0430

Dear Mr. Bailey:

We have reviewed our files for information on rare, threatened and endangered (RTE) species and natural trout streams for the areas of the proposed highway projects:

ਤੇ.	State Project U326*2*6.46 Federal Project NH-0002(316)C Franklin to Woodlands Marshall County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
5	State Project S354-13/1-0.22 North Fork of Lee Creek Wood County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
	State Project S205-2/23-0.00 00 Federal Project HPP-0223(003)D Ohio River Bridge Brooke County	Our records indicate no known occurrences of RTE species, wetlands or natural trout streams at this site. Surveys for freshwater mussels will be required.
J	State Project S328-15/4-0.83 00 Federal Project BR-0154(006)D Duhring Pony Truss Bridge Mercer County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
	State Project S317-19-26.19 Federal Project BR-0019(270)E Shinnston Bridge Replacement Harrison County	Our records indicate no known occurrences of RTE species or natural trout streams at this site. Surveys for freshwater mussels will be required.
	State Project S227-62-8.74 Federal Project BR-0062(812)D Tenmile Creek Bridge Replacement Mason County	Our records indicate no known occurrences of RTE species or natural trout streams at this site. Surveys for freshwater mussels will be required.

10f3

rage 2	0 7 5	Our records indicate no
NE -16-09	State Project WV 3 MP 20.90 WV 3 MP 20.90 Bank Stabilization Summers County	known occurrences of RTE species or natural trout streams at this site. Surveys for freshwater mussels will be required prior to any instream work. The U.S. Fish and Wildlife Service may require surveys for the threatened shrub Virginia spiraea (Spiraea virginiana).
TC	State Project U344-33/2-0.00 Spencer Sidewalk & Pedestrian Bridge Roane County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
TC	State Project US 219 MP 40.01 Linwood-Mace Rd. Culvert Replacement Pocahontas County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
TBM	State Project S310-60/7-0.15 Cane Branch Road Landslide Correction Fayette County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
TBM	State Project S310-6/2-0.01 Armstrong Creek Bridge Replacement Fayette County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
TEM	State Project 28-102/2-0.20 Aubrey Road Bank Stabilization Mercer County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
T6	State Project S355-01-4.50 Glen Fork Box Culvert Wyoming County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
RW	State Project S310-41-0.20 00 WV 41 Slide Correction Fayette County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
TBM	State Project CR 9/5 MP 0.30 Hinkle Hollow Rd. UT of Mill Creek Culvert Replacement Grant County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
TBM	State Project S310-60-13.83 US Route 60 MP 13.83 Rock Buttress Slide Correct Fayette County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.

The Wildlife Resources Section knows of no surveys that have been conducted in these areas for rare species or rare species habitat. Consequently, this response is based on information currently available and should not be considered a comprehensive survey of the areas under review.

PNR Page 3 of 3 4-16-09

Thank you for your inquiry, and should you have any questions please feel free to contact me at the above number, extension 2048.

Barbara Sargent
Environmental Resources Specialist
Wildlife Diversity Program





Ohio Department of Natural Resources ENGINEERING DIVISION

WV DOH

TED STRICKLAND, GOVERNOR

SEAN D. LOGAN, DIRECTOR

Division of Natural Areas and Preserves Steven D. Maurer, Chief 2045 Morse Rd., Bldg. F-1 Columbus, OH 43229-6693 Phone: (614) 265-6453; Fax: (614) 267-3096

April 15, 2009

Jacqueline Giles West Virginia Division of Highways 1900 Kanawha Blvd. East, Building 5 Charleston, WV 25305

Dear Ms. Giles:

After reviewing our Natural Heritage maps and files, I find the Division of Natural Areas and Preserves has no records of rare or endangered species in the Ohio River Crossing Bridges project area, including a one mile radius, at Brilliant in Wells Township, Jefferson County, Ohio, and on the Steubenville West and Steubenville East Quads [S205-2/23-0.00; HPP-0223 (003) D].

There are no state nature preserves or scenic rivers at the project site. We are also unaware of any unique ecological sites, geologic features, animal assemblages, state parks, state forests or state wildlife areas within a one mile radius of the project area.

Our inventory program has not completely surveyed Ohio and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although we inventory all types of plant communities, we only maintain records on the highest quality areas.

Please contact me at 614-265-6818 if I can be of further assistance.

Sincerely. Modella

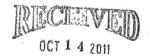
Debbie Woischke, Ecological Analyst

Natural Heritage Program

ohiodnr.com

DNR-0001

United States Department of Agriculture



ENGINEERING DIVISION WY DOH

Date: 10-12-2011

ONRCS

Natural Resources Conservation Service N. Panhandle Soil Survey Office 1 Ball Park Drive McMechen, WV 26040 (304) 242-0576 x117 (Phone) (304) 242-7039 (Fax)

Subject: LESA Determination

Proposed Ohio River Bridge Project State Project S205-2/23/0.00 00

Brooke Co., WV

To: Ben L Hark
Environmental Section Head
WV Division of Highways
1900 Kanawha Blvd E, Bldg 5, Room 110
Charleston, WV 25305-0430

Dear Ben,

A LESA determination was made for the Proposed Ohio River Bridge Project in Brooke County, WV. The 4 study areas contain between 57 and 86 total land acres, of which between 1.5 and 2.0 acres have been designated statewide important farmland. All sites contain no acres of prime farmland. Please find enclosed the completed AD-1006 form for your files.

There are currently no farmland protection programs that involve any of the Northern Panhandle counties. Also, please note that this evaluation was for the WV side of the river only.

If you have any further questions about this project, please contact me.

Respectfully,

Tim Dilliplane NRCS Soil Scientist

Cc: Katie Fitzsimmons, District Conservationist Carlos Cole, Area Resource Soil Scientist

Helping People Help the Land
An Equal Opportunity Provider and Employer

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)	**************************************	Date Of Land Evaluation Request 5/9/11						
Name Of Project Proposed Ohio River Bridge	Crossing	Federal Agency Involved FHWA-WV						
Proposed Land Use Infrastructure - Highway		County And State Brooke County, WV & Jefferson County, OH						
PART II (To be completed by NRCS)		Date Request Received By NRCS 9-2-2011						
Does the site contain prime, unique, statewide (If no, the FPPA does not apply do not com,	or local important farm	nland? of this form		No Acres info	ated Average F			
Major Crop(s)	Farmable Land In Go	vt. Jurisdictio			f Familand As De	fined in CDDA		
corn, hay	Acres: 31,900		56 %	Acres: 3	1,900:	56 %		
Name Of Land Evaluation System Used	Name Of Local Site A			Date Land	Evaluation Retur	36 /0		
LESA	none		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Date Cart	10-12-2011	ned by NRCS		
PART III (To be completed by Federal Agency)	.,,,,,,		T	Allemai	ive Site Rating			
			Sile 2	Site 28		Site EB		
A. Total Acres To Be Converted Directly			,	1		-		
Total Acres To Be Converted Indirectly								
C. Total Acres In Site			86,41	. 86.42	57.35	57.35		
PART IV (To be completed by NRCS) Land Eva	luation Information							
A. Total Acres Prime And Unique Farmland			0	0	0			
B. Total Acres Statewide And Local Importan	Farmland		2	2	1.5	1.5		
C. Percentage Of Farmland In County Or Loc	al Govt, Unit To Be Co	onverted	100.	100.	1001	,001		
 D. Percentage Of Farmland In Govt. Jurisdiction W. 	th Same Or Higher Relat	ive Value	.001	100.	.001	001		
PART V (To be completed by NRCS) Land Eval	uation Criterion		1		1001			
Relative Value Of Farmland To Be Conve	erted (Scale of 0 to 10	0 Points)	1.2	1.2	1.3	1.3		
PART VI (To be completed by Federal Agency) Site Assessment Criteria (These criteria are explained in	7 CFR 658.5(b)	Maximum Points						
Area In Nonúrban Use				-				
Perimeter In Nonurban Use		.,		1 ,				
Percent Of Site Being Farmed				-				
4. Protection Provided By State And Local Go	overnment		-		-			
5. Distance From Urban Builtup Area				-				
6. Distance To Urban Support Services								
7. Size Of Present Farm Unit Compared To A	verage			-				
Creation Of Nonfarmable Farmland			••••					
Availability Of Farm Support Services								
10. On-Farm Investments								
11. Effects Of Conversion On Farm Support St	ervices							
12. Compatibility With Existing Agricultural Use				·				
TOTAL SITE ASSESSMENT POINTS		400		-				
TOTAL SITE ASSESSMENT POINTS	160	0	0	0	0			
PART VII (To be completed by Federal Agency)								
Relative Value Of Farmland (From Part V)		100	О	0	0	0		
Total Site Assessment (From Part VI above or a loca site assessment)	'	160	0	0	0	0		
TOTAL POINTS (Total of above 2 lines)		260	0 .	0	0	0		
Site Selected:	Date Of Selection				Site Assessment Yes	Used? No 🖸		
						- 62		

(See Instructions on reverse side)
This form was electronically produced by National Production Services Staff

Form AD-1006 (10-83)



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110 Charleston, West Virginia 25305-0430 • (304) 558-3505

August 24, 2011

Ms. Katy Fitzsimmons
District Conservationist
US Department of Agriculture
Natural Resources Conservation District
McMechen Service Center
1 Ball Park Drive
McMechen, West Virginia 26040

Dear Ms. Fitzsimmons:

State Project S205-2/23-0.00 00
Federal Project HPP-0223(003)D
Agency Coordination
Proposed Ohio River Bridge
Brooke County, West Virginia and Jefferson County, Ohio

As part of the Environmental Assessment documentation for the above referenced project, the Agricultural Impacts Analysis for the above referenced project is being completed. This letter transmits the Farmland Conversion Impact Rating Form (Form AD-1006). The study area in West Virginia is currently not used for agricultural use, although some soil types within the study are classified as farmland type soils.

As noted on form AD-1006, four Build Alternatives are currently being evaluated, Alternatives 2, 2B, 8 and 8B. The Project Study Area limits for each of the alternatives are illustrated in the attached Exhibits. As requested, three copies of Form AD-1006 and Alternative Exhibits are enclosed for your use.

Upon our initial evaluation, it was found that Alternatives 2 and 2B include soil types classified as prime, statewide and local importance farmland acres to be converted directly into infrastructure use.

As a result of this project, a new river crossing would span the Ohio River and link WV 2 in Brooke County, south of Wellsburg with OH 7 in Jefferson County near the community of Brilliant. In addition to construction of a new bridge, roadway improvements will be made to provide new bridge approaches and continuity with the local road system.

Should you require additional information, please contact Ms. Jacqueline Giles of our Environmental Section at (304) 558-9669. Your cooperation is greatly appreciated.

Yours very truly,

Gregory L. Bailey, P.E. Director Engineering Division

_ _ .

Environmental Section Head

By: Ben 2 Hack

GLB:Hk Attachments

cc: Mr. Mark J. Sikora, P.E., HDR Engineering, Inc. Mr. Christopher Varcolla, P.E., ODOT Disctrict 11

bec: DDE(JG)

E.E.O./AFFIRMATIVE ACTION EMPLOYER

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of La	nd Evaluation Re	equest 5/9/11				
Name Of Project Proposed Ohio River Bridge C	rossing	Federal Ag	ency Involved	FHWA-WV				
Proposed Land Use Infrastructure - Highway		County And State Brooke County, WV & Jefferson County, OH						
PART II (To be completed by NRCS)		Date Requ	est Received By	NRCS				
Does the site contain prime, unique, statewide (If no, the FPPA does not apply do not comp				No Acres Irriga	ated Average Fa	arm Size		
Major Crop(s)	Farmable Land In C Acres:	Govt. Jurisdiction	n %	Amount Of Acres:	Farmland As De	fined in FPPA %		
Name Of Land Evaluation System Used	Name Of Local Site	e Assessment S	ystem	Date Land	Evaluation Return	ned By NRCS		
PART III (To be completed by Federal Agency)			- City A		ve Site Rating			
A. Total Acres To Be Converted Directly	***************************************		Site A	Site B	Site C 0.0	Site D		
			0.0	0.4				
B. Total Acres To Be Converted Indirectly C. Total Acres In Site			0.4	0.4	0.0	0.0		
	lustion Information		0.4	0.4	0.0	0.0		
PART IV (To be completed by NRCS) Land Eval	idation information							
A. Total Acres Prime And Unique Farmland	Complex 4							
B. Total Acres Statewide And Local Important	THE RESERVE OF THE RESERVE OF THE PARTY OF T	0						
C. Percentage Of Farmland In County Or Loc			-					
D. Percentage Of Farmland In Govt. Jurisdiction Wi		elative Value				_		
PART V (To be completed by NRCS) Land Eval Relative Value Of Farmland To Be Conve		100 Points)	0	0	0	0		
PART VI (To be completed by Federal Agency) Site Assessment Criteria (These criteria are explained in	7 CFR 658.5(b)	Maximum Points						
Area In Nonurban Use								
Perimeter In Nonurban Use								
Percent Of Site Being Farmed			Water Control					
 Protection Provided By State And Local G 	overnment							
Distance From Urban Builtup Area								
Distance To Urban Support Services								
7. Size Of Present Farm Unit Compared To A	Average							
Creation Of Nonfarmable Farmland						¥111		
Availability Of Farm Support Services			1					
10. On-Farm Investments				all the grane-				
11. Effects Of Conversion On Farm Support S	Services							
Compatibility With Existing Agricultural Use	е							
TOTAL SITE ASSESSMENT POINTS		160	0	0	0	0		
PART VII (To be completed by Federal Agency)								
Relative Value Of Farmland (From Part V)	100	o	0	0	0			
Total Site Assessment (From Part VI above or a loc site assessment)	al	160	0	0	0	0		
TOTAL POINTS (Total of above 2 lines)		260	0	0	0	0		
Site Selected:	Date Of Selection			Was A Loca	Site Assessmen	t Used?		

Reason For Selection:

Form AD-1006 (10-83)



Telephone Record

Project:	WVT_Wellsburg_Bridge	Project No: 83938	
Date:	March 16, 2012	Subject: LESA Determination	
Call to:	Tim Dilliplane, NRCS Soil Scientist	Phone No: 304-242-0576x117	
Call from	Amy Staud	Phone No: 304-748-8740	

Discussion, Agreement and/or Action:

I spoke with Mr. Dilliplane regarding the impacted statewide important farmland associated with this project. In his letter dated October 12, 2011, a reported 1.5 to 2.0 acres will be impacted. HDR's calculations were 0 acres for Alternatives 8 and 8B and 0.4 acres for Alternatives 2 and 2B. These were measured in GIS.

Mr. Dilliplane indicated his impacts and ratings were based on the maps provided. We agreed the difference between the impacts is likely due to the difference in using paper maps vs. GIS. Mr. Dilliplane agreed that it would be ok to keep the impacts as determined by HDR in the EA and note the difference shown by NRCS.

Ohio Department of Transportation, Office of Environmental Services FARMLAND PROTECTION POLICY ACT PROJECT SCREENING SHEET

١.	PF	ROJECT INFORMATION:	
	A.	County-Route-Section: JEF-New Ohio River Bridge	
		PID: 79353 Length: 0.47 miles	
	В.	Brief Description: Construct a new bridge crossing over the Ohio River in Brilliant Ohio to connect	
		West Virginia SR 2 to Ohio SR 7.	_
	C.	Screening Criteria for Land to be acquired	_
	(0	only one need be marked if it applies to entire project area; if none can be marked, FCIR form is required	i):
		Developed with a density of at least 30 structures per 40 acres.	
		Identified as urbanized area (UA) on U.S. Census Bureau Map.	
		X Identified as urban area mapped with a tint overprint on USGS topographical map(s).	
		Identified as urban-built-up on USDA Important Farmland Map(s).	
		Bridge replacement requiring less than 1 acre of new R/W	
		(approx. acre required).	
		Widening or intersection improvement requiring less than 3 acres of new R/W	
		(approx. acres required).	
		Temporary R/W to be returned to existing or greater productive capability	
		(approx acres required).	
		Channel easement for shaping existing channel	
ı.	cc	(approx acres required). DNCURRENCE:	
		It is hereby determined that completion of the Farmland Conversion Impact Rating form (USDA For	m
		AD-1006) is not required because the project will not affect farmland as defined in 7 CFR Part 658, a	as
		amended, or because the project falls within the criteria in the 1984 Memorandum of Understandin	ng
		between ODOT, FHWA and USDA/SCS.	
		District Environmental Coordinator 12 pt CoA Date: 9/7/11	_

Revised 12/12/2005



OHIO DEPARTMENT OF TRANSPORTATION 348 INTER-OFFICE COMMUNICATION EIVED

Office of Environmental Services

TO:

Lloyd MacAdam, District 11 Deputy Director

DATE: Marc

Attn: Tom Stratton

FROM:

Fullit DOesnis for Timothy M. Hill, Administrator, Office of Environmental Services

SUBJECT: Environmental Site Assessment

PROJECT: JEF - New Ohio River Crossing

PID: 79353

This office has reviewed the Environmental Site Assessment (ESA) Screening for the above referenced project which was produced by HDR Engineering, Inc. The comments below address the Ohio portion of the project. The West Virginia portion of the project was not reviewed.

Based on the information provided, a Phase I ESA should be conducted on the sites listed below.

Zimnox Coal, 1210 3rd Street Steel Valley Tank and Welding, 24 Co Rd 7E Marathon Gas Station, 1004 3rd Street Southeastern Equipment Company, 1356 3rd Street

If you have any questions or concerns, please contact Juliet Denniss, Environmental Supervisor, at (614) 466-7942.

TMH:jdd

C: File



OHIO DEPARTMENT OF TRANSPORTATION INTER-OFFICE COMMUNICATION

Office of Environmental Services

TO:

Lloyd MacAdam, District 11 Deputy Director

DATE: March 15, 2012

FROM:

Attn: Tom Stratton

Timothy M. Hill, Administrator, Office of Environmental Services

SUBJECT: Phase I Environmental Site Assessment

PROJECT: JEF - New Ohio River Crossing

PID: 79353

This office has reviewed the Phase I Environmental Site Assessment (ESA) for the above referenced project which was produced by HDR Engineering, Inc. The comments below address the Ohio portion of the project. The West Virginia portion of the project was not reviewed.

Based on the information provided, a Phase II ESA is warranted for the sites listed below for the noted issues. A Phase II ESA Work Plan is to be submitted once the preferred alternative is selected.

Site	Address	Issue				
Zimnox Coal	1210 3 rd Street	Gas and diesel USTs removed in 1992 but no closure report submitted, BUSTR phone call documentation shows soils taken from tank pit placed into Zimnox's coal mine for storage				
Steel Valley Tank and Welding	24 Co Rd 7E	Possible CD&D landfill, slag used for fill, sand blasting occurred outside				
Marathon Gas Station	1004 3 rd Street	Active UST release				
Southeastern Equipment Company	1356 3 rd Street	- Conducts maintenance, storage of antifreeze and batteries outside				

If you have any questions or concerns, please contact Juliet Denniss, Environmental Supervisor, at (614) 466-7942.

TMH:jdd

File





OHIO DEPARTMENT OF TRANSPORTATION INTER-OFFICE COMMUNICATION Office of Environmental Services

DATE: December 27, 2011

TO:

Lloyd MacAdam, District 11 Deputy Director

10 11 RECEIVED DEC & 9 2011

Attention: Thomas Stratton

FROM:

Noel Alcala, Noise and Air Quality Coordinator, Office of Environmental

Services

SUBJECT: Preliminary Noise Analysis Report dated December 2011

PROJECT: JEF- Ohio River Bridge Crossing PID 79353

We have reviewed the subject document prepared by HDR and received by this office on 12/21/11. We find the document acceptable. Noise impacts were identified and noise barriers were analyzed, however, noise barriers were NOT found feasible AND reasonable. No further noise analysis or consideration of noise mitigation is required.

If you have any questions or concerns, please contact Noel Alcala, Noise and Air Quality Coordinator at 614-466-5222.

NAA:naa

c: File



INTER-OFFICE COMMUNICATION

Division of Air Pollution Control

TO: Noel Alcala, Office of Environmental Services, ODOT

FROM: Frederick Jones, DAPC, ATU, OEPA

DATE: December 2, 2011

RE: JEF - New Ohio River Bridge, PID 79353 Qualitative Mobile Source Air Toxics (MSAT)

Analysis Report.

Mobile Source Air Toxic (MSAT) Analysis Document Review

Document Reviewed:

Qualitative MSAT Analysis Report JEF - New Ohio River Bridge, PID 79353.

Comments:

Upon Review, Ohio EPA does not have additional comments on the MSAT Analysis Report: JEF – New Ohio River Bridge, PID 79353. The Average Daily Traffic and the Vehicle Miles Traveled described in the report, is in accordance with the ODOT Technical Guidance for Analysis of Mobile Source Air Toxics to be categorized as a "Low MSAT effect "project."

The report identifies the limitation in predicting project specific health impacts through vehicle emissions and provides information in accordance to CEQ regulations 40 CFR 1502.22(b) regarding unavailable or incomplete information for a Low MSAT effect project.

cc: Paul Koval Supervisor, DAPC/ATU

From: Stratton, Thomas Varcolla, Chris Cc: Staud, Amy; Ben L Hark FW: PM2.5 Project Level Conformity Determination Request for Nonexempt Projects Thursday, November 17, 2011 2:02:14 PM Subject: Date: FYI Thomas E. Stratton ODOT, District 11 Environmental Coordinator Voice: 330-308-3992 Fax: 330-308-3965 xc: file From: Braun, Paul From: Braun, Paul
Sent: Tuseday, November 01, 2011 9:45 AM
To: Morris-Patricia@epamail.epa.gov; Akcala, Noel
Cc: Ayres, Craig; Schneider, Erica; Oesterling, Leigh; Lang, Robert; Stratton, Thomas
Subject: RE: PM2.5 Project Level Conformity Determination Request for Nonexempt Projects Noel. Sorry it took so long. I too agree that due to the low ADT and trucks this would not be a project of concern. Paul Paul J. Braun, P.E. State Implementation Plan Development and Rulemaking Ohio EPA, Division of Air Pollution Control 614-644-3734 From: Morris.Patricia@epamail.epa.gov [mailto:Morris.Patricia@epamail.epa.gov] Sent: Monday, October 31, 2011 10:50 AM To: Alcala, Noel

Co: Ayres, Craig: Schneider, Erica; Oesterling, Leigh; Braun, Paul; Lang, Robert; Stratton, Thomas

Subject: Re: PM2.5 Project Level Conformity Determination Request for Nonexempt Projects Based on the low ADT and truck traffic, I concur that these projects are not projecs of air quality concern. Patricia Morris Environmental Scientist (312) 353-8656 morris.patricia@epa.gov -----"Alcala, Noel" < Noel.Alcala@dot.state.oh.us > wrote: ----To: Patricia Morris/R5/USEPA/US@EPA, "Braun, Paul" < Paul.Braun@epa.state.oh.us >, "Oesterling, Leigh" mailto:ling@dot.gov Date: 10/28/2011 06:24AM Cc: "Lang, Robert" <<u>Robert.Lang@dot.state.oh.us</u>>, "Ayres, Craig" <<u>Craig.Ayres@dot.state.oh.us</u>>, "Schneider, Erica" <<u>Erica.Schneider@dot.state.oh.us</u>>, "Stratton, Thomas" <<u>Thomas.Stratton@dot.state.oh.us</u>>

Leigh, Patricia, and Paul:
The nonexempt projects listed in the table below are projects that we believe are not projects of air quality concern and have
met the statuatory requirements of the Clean Air Act and is exempt from PM2.5 Hotspot Analysis. Beloware the project
descriptions. See attached project location mapping.

Subject: PM2.5 Project Level Conformity Determination Request for Nonexempt Projects

These projects are listed on their MPO TIPs. These projects do not have an ADT >125,000 AND diesel trucks >8% in the design year. These projects require a project level conformity determination from FHWA in accordance with 40CFR93 and the FHWA and EPA Transportation Conformity Guidance for Qualitative Hot Spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas. Below is the traffic information for each project. As you can see, the traffic volumes

are low. Please let me know if you agree that these projects are not projects of air quality concern and no PM2.5 hotspot analysis is required so we can complete our environmental documents. A response by November 4, 2011 (1 week) would be greatly appreciated. Thanks.

Dist.	Project	PID	Project Description		Fiscal Year for construction	Existing	% Existing	Diesel Trucks Existing year	A Design year	% Design year	Diesel Trucks Design year 2030
4	SUM- IR76/IR77/Johnston St-11.27/12.22		Relocate Johnston St and remove 3 bridges that carry IR76/R77 over existing Johnston St and replace the bridges with fill (no added capacity).	орот	2015	Johnston St- 5800	Johnston St- 2%	Johnston St- 120	Johnston St- 5800		Johnston St- 120
4	SUM-SR93-6.92	76437	Widen roadway from 2 to 5 lanes from Robinson to Cormandy.	ОДОТ	2013	22600	3	730	28227	3	873
920 %	JEF-New Ohio River Bridge	79353	Construct a new bridge on new alignment over the Ohlo River.	BHJTS (MPO)	TBD	0	0	0	9800	2	200

If you have any questions or concerns, please do not hesitate to contact me by phone or email.

Noel Alcala, P.E.
Noise and Air Quality Coordinator
ODOT-Office of Environmental Services
1980 W. Broad Street
Columbus, OH 43223
614-466-5222
Noel.alcala@dot.state.oh.us

[attachment "JEF-New River Bridge Preferred Alternative.pdf" removed by Patricia Morris/R5/USEPA/US]
[attachment "SUM-76-77-Johnston St and SUM-93 mapping.dox" removed by Patricia Morris/R5/USEPA/US]